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Nelson H. F. Beebe  
University of Utah  
Department of Mathematics, 110 LCB  
155 S 1400 E RM 233  
Salt Lake City, UT 84112-0090  
USA

Tel: +1 801 581 5254  
FAX: +1 801 581 4148

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org),  
[beebe@computer.org](mailto:beebe@computer.org) (Internet)  
WWW URL: <http://www.math.utah.edu/~beebe/>

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## Title word cross-reference

(0, ∞) [MM03]. (t, s) [HY00]. 1  
[Bre05, KGDD05, VVD06]. 1 − d [Neg08]. 2  
[BH08, EHL07, HL02, Kop08, Sch02a,  
vdVIB07]. 2 × 2 [ADBN08]. 3 [BBM01,  
Deu07, DL03, EHL07, Med07, Sar03].  $p$   
[Gue04].  $A^\alpha, \log(A)$  [HHT08].  $B$  [BB00].  
 $\mathbf{H}(\text{curl})$  [BH09].  $\mathbf{H}$  [ABF05].  $C^0$   
[DJLT09, dVNS07].  $C^1$   
[DS02, SBM01, Zor00].  $C^2$  [AS05b].  $C^s$   
[LLF01].  $\mathcal{P}^k + 1 - \mathcal{S}^k$  [Daw02].  $\mathcal{V}$  [Woh05].  
 $C_{q_1}$  [AD00].  $\ell^1$  [WJ08].  $\ell_1$  [FS09].  $\epsilon$  [LR02].  
 $\Gamma$  [ABFM04].  $\gamma = 3$  [Vas01].  $H$   
[CW08a, TV05, GS07, GZ09, BHL03].  $H^1$   
[Bre03, CKR08, PF02].  $H^1(P^h)$  [VVD06].  
 $H_\infty$  [LWX00].  $hp$  [Hel09, LS07a].  $L^1$   
[GP09, Da08].  $L^2$  [DJLT09, ELS<sup>+</sup>02,  
HTW02, Mer08, Rod07, CK06a, JY09].  $L^\infty$   
[Mer08].  $L_1$  [HSW05].  $L_p$  [Gei06].  $\lambda < 0$   
[dP07].  $\lambda > 3$  [PP00].  $\leq 3$  [BJJ02].  $LL^*$   
[CMMR01].  $M$  [PY04].  $n$  [KS01a].  $O(h^2)$   
[AG03].  $P$  [Guo09, TV05, AC03, BG01,  
BXZ07, BBFP07, BH09, Beu02, DB03b,  
DER07, DK08b, Guo06, GS07, GZ09, Ju00,  
LY01b, LY02a, VO02].  $P^1$  [CT00].  $P_1$   
[PS03].  $P_1^{\text{mod}}$  [KT03].  $p \leq 2$  [PR01].  $Q^1$   
[Xu00b].  $Q_1$  [MNS09, NS01].  
 $Q_{k+1,k} \times Q_{k,k+1}$  [Zha09].  $r$  [PW09].  $\mathbf{R}^3$   
[XH05].  $R^d$  [EJR08, Sze04].  $R^n$  [Cao07].  $\mathbf{R}^s$   
[HSW05].  $u_{tt} = \text{div}(\sigma(Du) + Du_t)$  [CD04].  
 $V = K^A$  [UY00].  $W$  [SW04a].  $Y$  [Egg08].

**-Approximation** [GP09]. **-Box** [BHL03].  
**-Coercive** [VVD06]. **-Conforming** [BH09].

-**Continuity** [Zor00]. -**Convergence** [ABFM04, Rod07]. -**cycle** [Woh05]. -**D** [Bre05, Sar03]. -**Entropy** [LR02]. -**Error** [ELS<sup>+</sup>02, Mer08, WJ08]. -**Estimators** [PY04]. -**FEM** [Beu02]. -**Finite** [Hel09]. -**Galerkin** [PF02]. -**Harmonic** [BBFP07, VO02]. -**Interpolation** [BH09]. -**Laplacian** [DK08b, Ju00, LY01b, LY02a]. -**Methods** [SW04a]. -**Minimization** [FS09]. -**Nonconforming** [PS03]. -**Scale** [Egg08]. -**Sequences** [HY00]. -**Series** [BB00]. -**Smooth** [PW09]. -**Stability** [LWW00, JY09]. -**Structure** [DER07]. -**Version** [AC03, BG01, Guo06, LS07a, Guo09]. -**Widths** [KS01a].

1 [Guo06].

2002g [DGS03].

39 [DGS03].

**Absolutely** [BG04a]. **Absorbing** [AMR02, AMR03, CW03b, NT02, Sze04]. **Accelerated** [AG09]. **Acceleration** [BB09, LW03, Ovt03b, Van05]. **Accelerations** [GH03]. **Accuracy** [DGH02, ETW08, ELL02, GLL<sup>+</sup>03, RW05, Sim05, SL99, ST03, Xu00b, Zho01, dFN00]. **Accurate** [BL09, Dos04, JPT00, PR00]. **Acoustic** [BGS05, CE09, JRW02, MMS03]. **Acoustics** [ADZ09, BDL06, BDRS00]. **Action** [RS00]. **Active** [HO09]. **Acute** [KK01]. **Adams** [HS07a]. **Adaptation** [CCGHR03]. **Adapted** [BKT09]. **Adaptive** [Aza02, BMN02, Bar04, BHSI08, CU05, CET09, CLT05, CKNS08, CD01, CW03b, CL05b, CD03, CHR04, DDU02, DL05, DD07, DK08b, EP08, ELM00, GG09, HKW09, HKY00, KP07, KS08a, KS01b, Lam05, LMPQ04, MS02, MN05, MS09, MSTZ08, MNS00, PS05, Sta07, Ste03, Ste05, TT03, WZ07]. **Additive** [An05, BN07, CDS03,

DZ02, FK01, FS01, Hig06, Jay07, MRT02b]. **ADI** [BL00]. **Adjoint** [GM01, Har07, Lar00, MT04, Ait05]. **Adjoint-Based** [MT04]. **Adjustment** [HH09]. **Advection** [AM09c, BGP05, BZ06, Bur09, Des04, Des09, DL02, GH07, LBD<sup>+</sup>03, Mer08, MPP03, DEG08, San00a, San03, TF04, Wan00, WSE01, ZLAT09]. **Advection-Diffusion** [DL02, LBD<sup>+</sup>03, MPP03, San03, Wan00, ZLAT09]. **Advection-Diffusion-Reaction** [AM09c, BZ06]. **Advection-Dominated** [San00a]. **Advection-Reaction** [Bur09, WSE01]. **Affine** [AR02]. **Affine-Approximate** [AR02]. **Age** [Aya00, AD02]. **Age-Dependent** [Aya00]. **al.** [AK09]. **ALE** [BC06a]. **Algebraic** [AGG06, BB09, Bos07, FV04, FS01, Ger08, JW00a, JW00b, KK09, KMS05, SV05, Sch02a, Van05]. **Algorithm** [BMZ09, BDW99, IC00, Chu00, DW09, DEJ06, EJR08, GPD04, GKK03, HSW05, Kim08a, KT09, KRW08, LWW02, MR07, Neg08, Per09, Per02, RF03, Sar03, SH08, TWV00, TWB07, Tid02, UY00, YZ07]. **Algorithms** [AG03, Bac06, BR09b, BGMV08, ByS06, Che02, CN01, DLP05, DG00, DMW01, Du01, Fen00, FR08, GK08, Hig99, HKY00, KW06, LW06a, MST00, MS02, Pfl00, SWW08, SV03, SL06, TZ99, TV05, TCOZ03]. **Aligned** [AM09b]. **Allen** [BB01]. **Almost** [DDO07, DW09, HMY07]. **Along** [HK09]. **Alternating** [BF09a, PFF08]. **Alternative** [BMPT09]. **American** [ALY01, HW03, JD04, sQIXsJjB05, WZ08]. **Ampère** [FN09a]. **Anal** [DGS03]. **Analysis** [AG00, AC00b, AMR03, ADF09, Arb04, ABCM02, AKW05, BTW03, BC06a, BS07, BMN04, BY00a, Bar09a, BK02, BJT00, Bel00b, BDRS00, BNV06a, BNV06b, BRLM03, BMMS05, BMM05, BD07, BB09, BG04b, BJJ02, Bos07, BIMV08, BHS06, Bur05, BF09b, CMS00, CMR09, CTU09,

CCZ02, CET09, CP00, CP05, CHO07, CCPS00, CHD07, CHS00, CEJS02, CS08, CY07, CDZ03, CE05, CGSS09, Cop07, Daw06, DK08a, DDE03, DLV08, DL09b, DS09, DM08, Du00, ER02a, ETW08, EGR<sup>+</sup>08, ET05, EHL07, Fen00, FSL05, GMM07, Ger08, Gie05, GPD04, Gou02, Gro08, GR07, GMS05, GM00b, HW09a, HhW02, Har07, Hau02, HM07, HKW09, HMN02, HMS03, HS07b, JL02, JR05, Ju00, KM05, KPS06, KRW08, KM06, LN05, Lar00, LN04, LV04, LSX08, Lin07, Lin09, Liu00, LPWE05, LW06b]. **Analysis** [LS06b, LO09, MG01, Man06, MTW03, MPSP02, Mau09, NS09, NS01, Not07, OD09, OR04, PJ01, PJ02, Per02, PZ04, Pon07, Reu03, Ris01, RC01, RV06, San00a, San00b, SV08, SW04b, SW07, SE05, SD09, SS00c, ST03, TT00, THBS09, Tid02, Van05, VVD06, Wet00, WD00, XT06, YA05, Zha08, Zho01, Zor00, dVNS07, vdVIB07, Dar00, KL06]. **Analytic** [FDFD09, HV06, RW05]. **Analytical** [ZLAT08]. **Analyzed** [HDVV09]. **Analyzing** [CKK01]. **Anastomoses** [AQR06]. **Angle** [AD99, AD00, DL08b]. **Angles** [Cao05]. **Anisotropic** [AS02, AM08, AM06, BN07, CS07, Cao07, CM00, DDE05, DM08, GM06b, GGHS08, HK09, Kun01, MPP03, Nic01, NTFW08a, DEG08]. **Anisotropically** [LW00a]. **Anisotropy** [AM09b]. **Anomalous** [ZLAT08]. **Anterpolation** [Sar03]. **Aorto** [AQR06]. **Aorto-Coronaric** [AQR06]. **Application** [AD99, BGR02, CZZ06, GW07, Kal00, Mel05, MV03, Nik02, RS00, Sch05, SS00b, She03, SS03b, BW06]. **Applications** [ADZ09, AL09, BY00b, BD07, BHMR07, Buf05, CHS00, CF07, GMR07, GK09b, GZ09, KK09, KT08, Lu99, NZ06, OP00, VO02]. **Applied** [AKW05, BGP05, DF09, Kop03, NV04, San00a, SVW02, oWZ06]. **Approach** [AGW04, Bac06, Ber09, BR09b, CMX09, CT00, DDO07, Dep08, DL09a, DG00, FVV08,

HR09, HTW09, JVD02, Woh05, XY07]. **Approximabilities** [Guo06]. **Approximability** [BG01]. **Approximants** [KM05]. **Approximate** [AR02, BWWW08, Bue07, FLL<sup>+</sup>06, GHV00, IK08, IKT01, Per09, RBX08, RS00, ThT00]. **Approximated** [HR07]. **Approximating** [GS09, HMN02, LW00c, Wen09]. **Approximation** [AP02, Ain04, Ain05, Ain07, ACDD05, ADGK03, BG01, BC06a, BJ05, BBG99, BB01, BGN03, BNS04, BNW06, Bar04, Bar05a, Bar05b, Bar09b, BJT00, BY00b, BHL03, BZ02, BG04b, BBMZ09, BH05b, BP06b, BM02, CG00, Car05, CZZ06, CW08c, CHX07, Cod09, CP08, DS02, DDE05, DH07, DL05, Des04, DL09b, DGS01, DZ02, Du08, EL08, EKS04, EM03, EL07, EHR07, FK01, FL03, GR09, GH05, GP09, GS05, Gui03, GM00b, Guo06, Guo09, HB00, Hau02, Hau08, HSW05, HRW01, HPS04, Ju00, KD06, KP03a, Kaw08, KSS09, Leo01, Lin07, LW00b, LS06b, LL06, Mer08, MG03, MSTZ08, Nic01, NS01, OS07, PR00, PJ02, PS04, PW09, Pro08b, Rin09, RWG01, RS06, RHA03, SW05a, SW07, SL06, Thu08, Wol00, Xu00b, Xu00a, XLC02, XTH07, DGS03]. **Approximations** [AADL07, AR08b, AAL09, AGW04, Arm01, BTZ04, BFP08a, BK02, BFP08b, Ber04, BHD06, BJL03, Bur09, CFR00, CH02, DR08, DMC00, DHV00, DGHL04, EK00, ELW02, Fen06, Fer03, FG99, GKK03, HTW02, JRW02, JLM08, KP07, KPY02, KPY04, Lar00, Lep00, LL00, LW07, MSZ08, Mic02, MG05, NPSK07, SW03, ST07, SS00b, SEL09, Ste00, TK01, TV05, WY01, Wan08, ZaY04, Dem06]. **Arbitrary** [AR08b, AM08, Cod09, DDO07, Dic08, FQ00, KMS05, LMR02, SFNW05]. **Archimedes** [Kup06a]. **Arclength** [DKIK07]. **Area** [SS00c]. **Area-Preserving** [SS00c]. **Arisen** [Bel00a]. **Arising** [BDRS00, CHK01, HS00, HSY04]. **Arterial**

[QVZ01]. **Artificial** [BIR09, WZ08]. **Aspect** [AC00a, Cao05, Ovt03a]. **Aspects** [HL02]. **Assisted** [BPS09]. **Assumptions** [CH02, LPWE05]. **Asymmetric** [Vic04]. **Asymptotic** [ADBN08, BSC07, CCZ02, DLV08, Des09, FLL<sup>+</sup>06, Gug01, Hig00, Sch00, WSD05, Dar00]. **Asymptotically** [BX03a, BX03b]. **Asymptotics** [BBC08, Peh09]. **Asynchronous** [LMPQ04]. **Attenuated** [XTH07]. **Attraction** [Grü03]. **Attractors** [Grü03]. **Augmentation** [CWX09b]. **Augmented** [Dos05, Gui03, SV02]. **Autoconvolution** [DL08a]. **Auxiliary** [HX07]. **Averaged** [JLM08]. **Averaging** [CLT05, CCF09]. **Avoidance** [HZ07]. **Axially** [DDE03]. **Axis** [AM09b]. **Axis-Aligned** [AM09b]. **Axisymmetric** [LW06b, Pie05]. **Axisymmetrical** [CCGHR03].

**B** [BOS05, DK08a, HRW01, HK07, MST06]. **B-series** [BOS05]. **B-Spline** [HRW01, MST06]. **B-Spline-Based** [HK07]. **Backprojection** [RF03]. **Backward** [BF09a, DK99a, LS06a, MSZ08, MP02a, PYD06]. **Balance** [BB09, CGLGP08, LRR00]. **Balanced** [CGLGP08, GT03, Nou01]. **Balls** [HX00]. **Banach** [BGMV08, CU05, CP03, SGM01, YZ07, YH06]. **Bandlimited** [ST06]. **Barrier** [Aza02, NSV05]. **Barriers** [Gug01]. **Base** [Gib04]. **Based** [AR08a, AS05b, AA08, ABV06, Bea04, BR09b, BZ06, CZ09, Car02, CEJS02, CGH05, CN02, DZ09, DL06, DG00, Du01, DE08, ELL02, FN09a, GL00, HW09a, He03, HK09, HK07, IK08, KM06, LS06a, LF99, LW04, LCN08, LO09, MT04, NZ04, NJN07, Par01a, Pro08a, RWG01, Sch07, SLS09, Sto09, THBS09, WK01, XY07, Yu06]. **Bases** [DGH02, LS05, Ste07]. **Bashforth** [HS07a]. **Basis** [CTU09, Dep08, JK09, KDW08, PD05, SWL09]. **BDDC** [Kim08a, KDW08, KT09, LW06a]. **BDF2** [Hun01]. **BDFM** [AP02]. **Be** [AK09, Beb07]. **Beam** [AS05a, HO09]. **Beams** [CCS06]. **Bean** [EKS04]. **Beaver** [GR09]. **Behave** [dP07]. **Behavior** [AW09, Da08, LL06]. **Bellman** [BJ05, CJ09, WF08]. **Beltrami** [DD07, GK08]. **Bel'tyukov** [SV00]. **BEM** [GH00, GHS03, HM06, MGP00, MS00b, Say09]. **Bending** [ACPC02a, XLC02]. **Bernoulli** [AS05a]. **Besov** [BG01, Guo06]. **Best** [CYN00, Ker00]. **between** [DJ05a]. **BFGS** [LF99]. **Biased** [RS04]. **Bidomain** [EB08]. **Bifurcation** [BJJ02, GKS00]. **Bifurcations** [DGK03, KGDD05]. **Biharmonic** [BACCF09, DP00, Tha00]. **Bilaplacian** [BBK01]. **Bilinear** [Ris01]. **Binary** [DL05]. **Bingham** [LV04]. **Binomial** [JD04, sQlXsJb05]. **Biological** [BGR02]. **Biot** [KS05]. **Bivariate** [DS02, DFK00, GS00, LS09]. **Black** [Che00, HW03, KN00]. **Blends** [Hun01]. **Block** [BL00, Dos04]. **Block-Grid** [Dos04]. **Blood** [QVZ01]. **Boltzmann** [AM06, BB09, CHX07, JY09, PR00, Rin00, RSZ01, Rin03, RW00, RW07]. **Boolean** [LZ07]. **Bordered** [DGK03]. **Borsuk** [FL05]. **Bose** [BW07]. **Bottom** [ADZ01]. **Bound** [BM06, Dep08, Dos05]. **Bound-Constrained** [BM06]. **Boundary** [Abg03, ADZ01, AMR02, AMR03, AGH00, AA08, ADZ09, AKW05, Bea04, Ber04, Ber02, BHN02, CS02, CX08, CWL07, Cou09, DKS02, DMC00, Dos04, EP08, EL07, FGNQ02, FVV08, GHV00, GM06b, GMS05, HW09b, Her03, HS02, Hip03, KD06, KN00, KS01a, KM03, KLS03, Küg03, Kwe00, Lee99, LY01a, LLK<sup>+</sup>04, LY09b, MST00, MRS00, MV03, NS05, Obe06, Pao01, Pao07, Raf05, SV08, SP02, Ste00, ST03, Sze04, Waa08, WZ08]. **Boundary-Value** [AA08, Ber04]. **Bounded** [BIR09, HSW05, RSZ01]. **Boundedness** [HMS09]. **Bounds** [AR08b, BJ05, Bue07, JCK08, OP00, SBBHP04, VV09, dFGAN08]. **Bourgain** [AK09]. **Box** [BHL03, Gre07, Ric02, Kup06a]. **Box-Schemes** [Gre07]. **BPX** [MKB07].

**BPX-type** [MKB07]. **Brezzi** [LV04].  
**Brownian** [Men06]. **Bubble**  
 [CS07, FJMT07, Ris01]. **Bubbles** [San00a].  
**Bump** [Ova07]. **Burgers**  
 [LaY09, LL06, WML03]. **BV** [Pie05, EK00].  
**Bypass** [AQR06].

**C0** [ByS06]. **C1** [LM06]. **Cahn**  
 [BB01, Fen06, BBG99, KSS09].  
**Cahn/Cahn** [BB01]. **Calculating** [SH08].  
**Calculations** [KEN01, SK03, SE05, Sou05].  
**Calculus** [AG03, LWW02]. **Calderon**  
 [CN02]. **Camassa** [CKR08, HR06, XS08].  
**Can** [AK09, Beb07, WZ07]. **Cancellation**  
 [GMR07, Ste07]. **Capturing** [Ran08].  
**Cardinal** [TWB07]. **Carlo**  
 [ALNO07, BMPT09, Dic07, Dic08, YH06].  
**Cartesian** [BHD06, CKPS01, Des04].  
**Cascade** [Che02]. **Case**  
 [CKK01, GAT00, MS02, Maj05, PS02a,  
 PS02b, PR01, Tow01, Yu06, dFGAN09].  
**Cauchy** [DM06]. **Cavity** [BBK01]. **Cell**  
 [EP08, Nic05, Nic06]. **Cell-Centered**  
 [EP08, Nic05]. **Cells** [LSTZ07]. **Centered**  
 [EP08, Nic05, Nic06]. **Central** [BC05, BL03,  
 LRR00, LSTZ07, Par01a, WF08].  
**Centroidal** [DJ05b, DEJ06]. **Certain**  
 [BHN09, BY00b, YH06]. **CEV** [WZ08].  
**CFL** [KD06, MP03, WH08]. **Chains**  
 [SS00b]. **Changes** [Hac07]. **Changing**  
 [CFFM08, DK99a]. **Channel** [ASXZ08].  
**Chapman** [Cai03]. **Characteristic**  
 [ER02b, FN09b, FV03]. **Characteristics**  
 [BNV06a, BNV06b, CEJS02, Kac01, PU99].  
**Characteristics-Based** [CEJS02].  
**Characteristics/Finite**  
 [BNV06a, BNV06b]. **Characterization**  
 [AK09, CG04]. **Chebyshev**  
 [Boy02, KM05, MS00a, RW05, WML03].  
**Chemotaxis** [EK09]. **Circulant**  
 [Ber02, CYN00]. **Circulant-Like** [Ber02].  
**Circular** [BBK01]. **Class**  
 [AMT04, CG00, CO02, DMO07, JJ06,  
 Med02, SR02, TCOZ03, Wen05].

**Classification** [ABFM04]. **Closed** [UY00].  
**Closely** [AKKL05]. **Clough** [SBM01].  
**Cluster** [LO09]. **Clustering** [GGHS08].  
**Coadjoint** [EF01]. **Coarse**  
 [KPS06, NV04, PS08]. **Coarse-Graining**  
 [KPS06]. **Codes** [Kup06b]. **Codim**  
 [KGDD05, BJJ02]. **Coefficient**  
 [BF09a, BGMV08, Bue07, MG05].  
**Coefficients** [BMMS05, BMM05, BN07,  
 BGS05, CCZ02, CDZ00, DDP06, KWD02,  
 MT05, SGM01, SV08, SD05, TK01].  
**Coercive** [BH04, VVD06]. **Coercivity**  
 [EG08]. **Collision** [PR00]. **Collocation**  
 [AB08, AB00, AB03, Ait05, AKW05,  
 BNT07, BD03, BF09a, BPV01, BH05a,  
 CHX03, CWX09a, CMX02, DD04, GW07,  
 HMS03, KK02a, LFB02, LS08, MS00a,  
 NTW08a, NTW08b, PFF08, Par01b, Par01c,  
 PPT05, Sch07, Sid00, Xu00a, KL06].  
**Colocated** [EHL07]. **Combinatorial**  
 [HX00]. **Combined** [BH04, SW09].  
**commutator** [Tha06]. **commutator-free**  
 [Tha06]. **Compact**  
 [AK07, BACF06, BACCF09, BGM07, Des09].  
**Compact-Equivalent** [AK07].  
**Compactness** [BCDD06, Raf05].  
**Comparing** [Can05]. **Comparison**  
 [For09, NV04]. **Compatible** [CP00, GZ09].  
**Complementarity** [HTCP09]. **Complete**  
 [HW09b]. **Completely** [Da08]. **Complex**  
 [BT00, KDN00, TJ00]. **complexity** [Dar00].  
**Complicated** [PS08]. **Component** [KJ03].  
**Component-By-Component** [KJ03].  
**Components** [SVW01, SVW04].  
**Composite** [LMPQ04, PS08, SS07, Ste07].  
**Composite-Grid** [LMPQ04].  
**Compressible**  
 [KT05, Kwe00, Liu00, PW99a].  
**Computable** [AR08b, BCT00].  
**Computation** [ALNO07, BGS05, CM01,  
 Dep08, DV02, DGK03, HTW09, IZ05,  
 LWX00, LaY09, LPSS00, Ovt08a, Ovt08b,  
 PS08, SP02, Tod06]. **Computational**  
 [DL09a, Moo05, WY07]. **Computations**

[Ort09]. **Compute** [DK08a].  
**Computerized** [RS00]. **Computing**  
 [AA08, Ayo02, BW07, BL01, Boy02, DEJ06,  
 GS03a, GKK03, HHT08, KB02, LS09,  
 MMS03, PJ01, PJ02, SBBHP04, ST07,  
 TWV00, TWB07, WZ05, Ovt08a, Ovt08b].  
**Concentrated** [BEL08, JV03, KM03].  
**Condensates** [BW07]. **Condition**  
 [AD99, AD00, ADZ01, BMN02, DR08,  
 DM06, DKIK07, DL08b, GR09, KD06,  
 Kwe00, RBX08, SY00]. **Conditional**  
 [GGGS08]. **Conditioning**  
 [AC03, DWZ09, GM06b]. **Conditions**  
 [Abg03, AMR02, AMR03, ADZ09, BOS05,  
 BHN02, BB00, DS99, DMC00, EL07,  
 FGNQ02, GHV00, GLL08, GMS05, HW09b,  
 HMS09, KD06, KN00, Lee99, MV03, NS05,  
 Pao07, Raf05, SFNW05, Spi07, Sze04,  
 Waa08]. **Conductivity** [Küg03]. **Cone**  
 [Men06]. **Conformal** [HT08, MR07].  
**Conforming** [BH09, Bur05, CZ09, CT00].  
**Conical** [BGS05]. **Conjugate** [AB03, BK01,  
 ETW08, Ovt08a, Ovt08b, Rie05].  
**Connected** [DLST07, RD03]. **Connection**  
 [BG05]. **Connections** [BKT09].  
**Conservation**  
 [AJG04, AR08a, ADN00, AMT04, BC05,  
 BHL03, Bre05, BKT09, CLG05, DMO07,  
 GM00a, yGpMT01, HL00, Kim02, LV08a,  
 LV08b, LW00c, MP03, Mic02, Mis05, Mor01,  
 MV00, NP00, Par01a, QS08, ThT00, TT03,  
 TW07, Tow00, Tow01, WN00, ZS04, ZS06].  
**Conservative**  
 [Arb04, BW07, BFV09, CT00, CGW07,  
 GLL<sup>+</sup>03, JR05, LMR02, PZ04, RY05].  
**Conserving** [Reb07, SWW08].  
**Consistency**  
 [BZ03, Har07, OD09, Ven09, LV08a].  
**Consolidation** [KS05]. **Constant**  
 [HSW05, MG05, Ver09, WJ08].  
**Constant-Free** [Ver09]. **Constrained**  
 [Ani09, Bad06, BM06, DH07, DHV00, Dos05,  
 HH09, KLP08]. **Constraint**  
 [BBFP07, JVD02, LMR<sup>+</sup>05, TF04].  
**Constraint-Preserving** [BBFP07, TF04].  
**Constraints** [BBMZ09, CHK01, FR08,  
 Jay07, LMR<sup>+</sup>05, LM06]. **Constructing**  
 [CKK01, Chu00, SKJ02]. **Construction**  
 [AMR03, Che02, DS99, DLP05, KJ03, PZ04].  
**Constructions** [Dic07]. **Contact**  
 [AS05a, ACS09, Bel00a, CF03, HS00,  
 HhW02, HW05, NSV05, RC01]. **Containing**  
 [Dic08]. **Containment** [HJ03].  
**Continuation** [DLM07, DKIK07, FK05,  
 FDFD09, HV06, KLQ<sup>+</sup>08]. **Continuity**  
 [Zor00]. **Continuous**  
 [AGW04, AW05, Bre05, BFH06, CM08,  
 CGW07, CGL09, GKK03, Gui03, MST06,  
 PY04, PW09, RHA03, SV02, vdVIB07].  
**Continuous-Discontinuous** [vdVIB07].  
**Continuum** [Lin07, OZ08]. **Contour**  
 [HHT08, ST07]. **Contours** [WT06].  
**Contractivity** [GPHA07]. **Control**  
 [BZ02, CET09, CD01, CYL08, DH07,  
 DMO07, DHV00, GM05b, GM00b, HO09,  
 HH09, IK08, KN08, LWX00, LY01a, LY02b,  
 LMTY04, LY09b, MST07, Med02, MT04,  
 Rin09, RV06, RWY07, RLK09].  
**Control-Volume** [RWY07].  
**Controllability** [Neg08]. **Controlled**  
 [CS01]. **Convected** [BDL04]. **Convection**  
 [BC06a, BK02, BGM07, BNV06a, BNV06b,  
 BCT00, BHS06, ER02a, EK00, GHV00,  
 Hun01, Kac01, KD06, KSS09, KT03, Kop01,  
 KS01b, Kop03, Kwe00, LRV00, Lin09,  
 LPWE05, Nic06, OR04, Pfl00, ST03, Tid02,  
 Ver05b, Ver05a, Voh07].  
**Convection-Diffusion** [BC06a, BGM07,  
 BCT00, BHS06, ER02a, EK00, Kac01,  
 KD06, KT03, Kop01, KS01b, Kop03, LRV00,  
 Lin09, Pfl00, ST03, Tid02, Ver05b, Ver05a].  
**Convection-Diffusion-Reaction**  
 [BNV06a, BNV06b, Voh07].  
**Convection-Dominated**  
 [BK02, Kwe00, OR04].  
**Convection-Reaction** [LPWE05].  
**Convergence**  
 [AG00, AS05a, ADF09, An05, AGW04,

AMT04, ABFM04, BTW03, Bad06, BMN02, Bar05b, BP06a, BJM09, BK01, Bel00b, BACF06, BGM07, Bes04b, Bes08, BHR07, BCC08, BMZ09, BLS05b, BF09b, Cai03, CMR09, CFR00, CFFM08, CKNS08, CHD07, CDZ03, CE05, CDG08, DDU02, DD04, DH07, Dem02, DER07, DK08b, Dos05, DM08, Du00, Du01, DEJ06, DE08, EHW00, EJR08, EG03, EGM05, EHL07, Fer03, Fil01, FS01, Ger08, GPHA07, GKK03, GK09b, GGGS08, GS07, HK01, HTCP09, Han06, HS07a, HLP08, HMS02, HR06, HKW09, HMS03, JKR01, JJ06, JD04, JLM08, JV03, KP07, KDZ09, KPT05, KS08b, KT08, Leo01, LW00a, Lin07, LRV00, LW00c, LPWE05, LW06b, LW07, MR07, MN05, MV03, MG03, Mis05, MS09, MNS00, MV00, NS03, Neg08, Not07, OR04]. **Convergence** [Ovt03a, Ovt03b, PS04, Per02, Pfl00, Pie05, Pin04, Pro08a, sQIXsJjB05, QS08, RPK04, Reu03, Ris01, Rod07, SSTT05, San09, SV08, Sch07, SD09, Sou05, TW07, Tid02, Tow00, UY00, Waa08, Wal05, Wan01, Wan07, Wen05, WN00, XH05, YZ07, KL06, Da08, Guo09, LV08b]. **Convergent** [BBP08, BBFP07, BGMV08, CKR08, GG09, LF99, LS08, Obe06, WWL09]. **Convex** [AM09a, Bar09b, CU05, CCZ02, CWL07, Dos05, Fer03, GS05, LY01a, LY09b, UY00]. **Convexity** [Han08, Yu06]. **Convexity-Preserving** [Han08]. **Convolution** [GH05]. **Convolution-Thresholding** [GH05]. **Cooperative** [KK09]. **Coordinates** [BHD06]. **Corner** [BB09, CK01, HZ07, LMW06]. **Coronanic** [AQR06]. **Corotational** [SWW08]. **Corrected** [KR00, SL06]. **Correcting** [Kup06b]. **Correction** [ELM00, FS09, GS03b, GMS05, HL03b, KLR06, KW01, Med07, NV04, Ovt08a, Ovt08b, SV05]. **Corrections** [AGG06]. **Corrector** [BGP05, BT02, Rin01, SV08]. **Corrigendum** [DGS03]. **Cost** [Nik02]. **Cost-Functions** [Nik02]. **Coulomb** [HR07, HL09a, ZaY04]. **Counter** [RW00]. **Coupled** [BRLM03, EJS09, GR09, Xu00a]. **Coupling** [Daw06, DQV07, GH00, GHS03, GMM07, GSWY08, Hip02, Hip03, HM06, LSY03, Lin09, MMS03, MX07, RY05, Say09]. **Courant** [Fer03]. **Covolume** [CK00, CKK01, KK00]. **Crack** [BSES05]. **Crank** [He03, HS07a, Rod07]. **Creeping** [LV04]. **Critical** [YZ07]. **Cross** [KT05]. **Cross-section** [KT05]. **Crouzeix** [RBX08]. **Crystal** [BFP08b, DPvDC08, LW00b, WWL09]. **Crystalline** [UY00]. **Crystallization** [Bur01]. **Crystals** [DGS01, Sou05, DGS03]. **Cubature** [HX00, HS09, Kup06a, Kup06b, LSX08, Vic04]. **Cubic** [AB08, CK06b, SBM01]. **Curl** [BLS08, Chr05, LMW08a, DDO07, HX07]. **Curl-Curl** [BLS08]. **Current** [Hip02, LM07, PU99]. **Current-Voltage** [PU99]. **Curvature** [CM01, For08, GH05, LN05, Leo01, UY00]. **Curvature-Dependent** [Leo01]. **Curve** [Can05, CM01, UY00]. **Curved** [Zha08]. **Curves** [Ker00, KZ04, LM06]. **Curvilinear** [AC03]. **cycle** [Woh05]. **Cycles** [KGDD05]. **Cyclic** [PDP06]. **Cylindrical** [LPSS00]. **D** [BBM01, BH08, Bre05, Deu07, DL03, EHL07, HL02, Kop08, Med07, Sar03, VVD06, vdVIB07]. **DAEs** [Jay07, LS02]. **Damped** [BJ03]. **Darcy** [BC09, BFV09, CMX09, DS07, DQV07, GS09, GR09, MTW02, MX07, RY05]. **Data** [BNT07, CG08, CKR08, CP08, DGH03, ET08, FR08, GT00, JV03, LS09, Lin06, MNS00, Nik02, NTW08a, NTW08b, SEL09, XY07, Yu06]. **Data-Fidelity** [Nik02]. **Davidson** [Ovt03a, Ovt03b]. **DDG** [LY09a]. **Debye** [BF08]. **Decomposing** [SVW02]. **Decomposition** [Bel04, Beu02, BD03, BZ06, CPR<sup>+</sup>03, CET09, DDO07, Den03, DQV07, DKW08, DG00, Du01, ETW08,

Fen00, FW09b, GL00, GH03, HZ03, KV02, LS09, LCNY08, Mar01, MG05, QX06, RP03, SFNW05, SL06, SVW01, TW07, TK01].

**Decompositions** [HSY04, IZ05]. **Defect** [ELM00, KLR06, KW01, Sou05].

**Defect-Correction** [ELM00]. **Defective** [EL07, FGNQ02, FVV08]. **Defects** [Lin07].

**Defined** [DD07]. **Definite** [CDS03, DK99b].

**Deflation** [NV04]. **Degenerate** [BBG99, BB01, Beu04, BN07, CG00, CNPS07, CEJS02, EK00, Kac01, MV03, Obe06].

**Degree** [BXZ07, GS00, HR00, HS09, KD03, RB09].

**Delay** [AG03, BK00, BH07, Bue07, ER02b, Gug01, JPCH06, LBH03].

**Delay-Differential** [BK00]. **Delays** [BH05a]. **Densities** [BL09, KHP02].

**Density** [KHY09, LW07]. **Dependent** [Aya00, BHN09, BDR09, Dep08, DS09, EM03, EHR07, Ger08, Gra08, GMS05, He03, HS07a, HL03a, JD04, KR05, Küg03, Leo01, MST05, PR01, SK03, Tha08, WW07, Yu06].

**Depending** [AC00b]. **Depth** [ADZ01].

**Derivation** [CG09]. **Derivative** [BXZ07, CW08c]. **Derivatives** [HK09, Lin06]. **Derived** [Bos07]. **Descent** [BCC08, GLQZ02, IKT01]. **Design** [AQR06, BR09b, Sze04]. **Designs** [CW06a].

**Detecting** [FGS07]. **Detection** [AGY05, GT00]. **DG** [CDG08, GR09].

**DGFEM** [SST03]. **DGM** [KD06].

**Difference** [ADZ01, ADGK03, BL00, Bea09, BACCF09, BGM07, BLS<sup>+</sup>05a, BZ03, BLS05b, CMR09, CKR08, CV05, Cou09, EK00, FG99, HR06, JV03, KU02, KPY02, KPY04, Mic02, Mis05, NT02, NPSK07, Obe06, Par01b, Rin03, SGM01, SY00, Tow00, Tow01, WB00, WWL09, YA05].

**Differences** [BWWW08, DK99b, Rab00, SW03, SLS09, dB03a]. **Differencing** [Par01a, RW05, WF08]. **Differential** [Ayo02, BTZ04, BNT07, BHN09, BK00, BY00b, BCM04, BGMV08, Bos07, BPV01, BH07, Bue07, BT02, BL09, CMMR01, CJ09, CM08, CMM03, CP03, DL09a, DZ02, ER02b, HL00, Hau02, Hau08, HJ03, HMS02, HMY07, HMS03, JVD02, JW00a, JW00b, JPCH06, KMS05, LLRZ00, LL00, LS07b, MS00a, MSZ08, MMRR06, MMR06, MT05, NTW08a, NTW08b, PPT05, Röß09, San09, San00b, SS08, Sch02a, SP02, She03, SEL09, WM08, Yan05, Tha06].

**Differential-Algebraic** [Bos07, JW00a, JW00b, KMS05].

**Differentiation** [BF09a, Olv09, Slo04].

**Diffraction** [BY00a, BGS05]. **Diffuse** [Fen06]. **Diffusion** [Aya00, AD02, AM09c, BC06a, BMN04, Bea09, BGM07, BNV06a, BNV06b, BCT00, BB09, BLS05b, BHS06, BZ06, CNPS07, CV05, DDE03, DDE05, DJ05a, DM08, DL02, EL08, ER02a, EHR07, EK00, GM05a, GHV00, GH07, GGGs08, Kac01, KD06, KT03, Kop01, KS01b, Kop03, Kop08, LX09, Lin08, LRV00, Lin09, Liu00, LBD<sup>+</sup>03, LY09a, Luc08, MPP03, NT02, Nic06, Pfl00, DEG08, PU99, Pin04, sQlXsJjB05, RS06, Rou00, San03, SWB<sup>+</sup>04, ST03, Tid02, Van05, Ver05b, Ver05a, Voh07, Wan00, YA05, ZLAT09].

**Diffusion-Convection-Reaction** [Nic06].

**Diffusions** [MT09, MSTZ08]. **Diffusive** [GT03, JPT00, KU02, NP00]. **Digital** [CS01, DLP05, PDP06]. **Dimension** [BHPS09, DFK00, RSS04, TJ00, Vic04].

**Dimensional** [BGM07, Bes04b, Bes08, BLS08, BH05b, Cha07, DDP00, DDO07, Dic07, DL09b, Du08, GS09, GHN03, GMM07, GM00a, GGGs08, HLP08, JR05, Kim08b, KWD02, Kop01, KS01b, Kop03, LM07, LMW08a, Lin07, LZ08, MP02b, PS02a, PZ04, Pon07, RD03, Reu03, San03, TT03, TW06, TV05, Van05, Wan00, oWZ06]. **Dimensions** [AH06, Bea04, Bel04, BH09, CPR<sup>+</sup>03, CE09, CG05a, CG05b, DB03b, DKW08, Guo06, Guo09, GZ09, HZ03, KLPV01, KL05, Lin08, Mar05, SE05, TK01, WTW00].

**Diminishing** [BW07, FS04]. **Direct**



- [BG01, Pon07, LY09a]. **Direction**  
 [BF09a, MG01, PFF08]. **Directional**  
 [HK09, SLS09]. **Directions** [GLQZ02].  
**Dirichlet**  
 [AB00, Bar09a, BG05, HRW01, MV03].  
**Discontinuities** [BH08, Mis05].  
**Discontinuous**  
 [AJG04, Ain07, ADF09, ABCM02, AM09c, BJM09, BMMS05, BMM05, BPD08, BS06, BHS06, BP06b, BKT09, BS09, CCPS00, CS05, CCS06, CDZ00, CC04, CW06b, CE06, CE09, CKPS01, CKSS02, CG08, CGSS09, CG09, CGL09, Daw02, Daw06, DMO07, DDP06, DS09, EK09, EG06a, EG06b, EG08, FK01, FW09a, FSL05, GSWY08, GP99, GSS06, GP07, Har07, HKW09, HPS04, KP03a, KP07, KSS09, KR05, Kwe00, LN04, LS07a, Lin08, LMTY04, LSTZ07, LY09a, MG03, OD09, OS07, DEG08, RWG01, RS06, SS00a, SD05, SW05b, TK01, Tow00, Tow01, VVD06, Wal05, Wan07, WH08, XS08, YS02, Ye04, Ye06, ZS04, ZS06, vdVIB07].  
**Discrepancy** [DLP05, HY00]. **Discrete**  
 [Ain04, AMR03, ADN00, AL09, ABFM04, BZ02, BCDD06, CS02, CE05, DDE05, DDO07, Fen06, Gei06, GT03, GGGS08, KK09, LMR02, LFB02, LSX08, LWX00, MS02, MP03, MS00b, Mic02, NZ06, OPR09, Raf05, RD03, ZaY04, dFGAN09].  
**Discrete-Time** [LFB02, LWX00].  
**Discretization**  
 [Abg03, AS05a, BBP08, BBK01, BNV06a, BRLM03, BC06b, BB07, Ber09, Beu04, Buf05, CD04, Da08, DER07, DDP06, EB08, GM05a, GPPP06, GR07, Grü03, HW09a, JK09, Kal00, Kim08a, Kim08b, Lin08, MP01, Mor01, OPR09, PR01, Pro08a, RPK04, Rin00, RV06, SS00a, Sch02b, SR02, TJ00].  
**Discretizations**  
 [AMR02, Beb07, BCT00, CMS00, DZ08, GM08, GSWY08, Han06, HO08, Har07, KDW08, KT09, LZ07, Mar01, OD09, PW99a, PW99b, RS04, Sch02a, Voh07, WK01, vPS03].  
**Discretized**  
 [BNV06b, BK03, HV05, LR02, Reu03].  
**Dispersion** [Ain04]. **Dispersive**  
 [AW09, IZ09]. **Displacement**  
 [BJM09, Böt06, CS03]. **Dissipative**  
 [AW09, ADBN08, BDRS00, DGS01, Han06, HL03b, LL06, DGS03]. **Dissolution**  
 [DPvDC08]. **Distance** [AGG06].  
**Distributed** [GM00b]. **Div**  
 [CK06a, Chr05, LMW08a, ABF05, CW08a, DDO07, HX07, WY07]. **Div-Curl**  
 [Chr05, DDO07]. **Div/Curl** [LMW08a].  
**Divergence** [BLS08, Wen09, Zha09].  
**Divergence-Free** [BLS08, Wen09, Zha09].  
**Divided** [Rab00, dB03a]. **Dogleg**  
 [PSWS08]. **Domain** [AADL07, AGH00, Bel04, BSES05, Beu02, BD03, BGMV08, BZ06, CPR<sup>+</sup>03, CHL09, Den03, DQV07, DKW08, DK99b, DG00, Du01, DLST07, Fen00, GL00, GH03, HR09, HZ03, HSY04, Jia04, LS09, Mar01, MG05, QX06, SFNW05, SL06, TW07, TK01, VW04, Zha08].  
**Domains**  
 [BS08, BACCF09, CCZ02, CL05a, FLL<sup>+</sup>06, HB00, KDZ09, KK01, LPSS00, MST05, PS08, RD03, RSS04, RSZ01, She00, SW07, Zha08].  
**Dominated**  
 [BK02, Hum01, Kwe00, OR04, San00a].  
**Downwind** [RS04]. **Downwind-Biased**  
 [RS04]. **DP**  
 [DDP06, KL05, Kim08b, KRW08]. **Drift**  
 [GM05a, PU99, Pin04]. **Drift-Diffusion**  
 [GM05a, PU99]. **Driven**  
 [BBK01, CM01, DZ02, Hau02, Hau08].  
**DSMC** [RW07]. **Dual**  
 [BEL08, BS03, GH00, GMM07, KWD02, OD09, She03, TV05, VV09, Woh00].  
**Dual-Dual** [GH00]. **Dual-Mixed**  
 [GMM07]. **Dual-Petrov** [She03].  
**Dual-Primal** [KWD02, TV05]. **Duality**  
 [DDO07, OPR09]. **Dufort** [MPPS02].  
**Duhamel** [BGMV08]. **Duhamel-Like**  
 [BGMV08]. **Dijkstra** [Per02]. **Dynamic**  
 [AS05a, HW09a, RP02, Vas01]. **Dynamical**  
 [ADZ09, CD01, EL09, GW07, HPS05, IK08].

**Dynamically** [DK99a]. **Dynamics** [Aza02, BJL03, CKR07, FVV08, KPS06, KV02, QVZ01, WY07, vdVIB07]. **Dynamos** [CZZ06].

**Eddy** [BIR09, Hip02, HL03b, JL02, KR05, LM07, Med07]. **Edge** [AS02, AGY05, BCDD06, Chr05, DB03b, LM07, LMW08a, MG01, Nic01, Ova07, Raf05, TK01, TV05, XH05]. **Edge-Bump** [Ova07]. **Edges** [ET08, GT00, HK09]. **Effective** [BBC08, CT00, KB02, Lam05]. **Effects** [ER02a, Nou01]. **Efficient** [Bar05a, DMW01, HSY04, IZ05, LMR<sup>+</sup>05, LMW08b, SP02, She00, Vee01, WZ05, Xu00a]. **Eigencomputation** [Sim05]. **Eigenfunction** [MG03]. **Eigenproblem** [BP06b]. **Eigenproblems** [CFR00]. **Eigen solvers** [EL09]. **Eigenvalue** [BDRS00, DZ08, GGO9, Lar00, MG05, Ovt03a, Ovt03b, Ovt08a, Ovt08b, SS03b, Tod06]. **Eigenvalues** [AA08, Bar09a, BT07, Bue07, CW08b, Chu00, MG03, Ovt08b, SS03b]. **Eikonal** [CFFM08, CF07, QZZ07]. **Einstein** [BW07]. **Elastic** [CP00, Gie05, NPSK07]. **Elastic-Plastic** [Gie05]. **Elasticity** [ACS09, CS03, CS04, DW09, HW09a, HS08, KMM00, Kim08a, Kim08b, MMSW06, PW06a, PW99a, PW99b]. **Elasto** [BMPT09, Sta07]. **Elasto-Plastic** [BMPT09]. **Elasto-Plasticity** [Sta07]. **Elastodynamics** [Pro08a]. **Elastoplasticity** [AC00b, BS03]. **Electric** [CN02, HS02]. **Electrical** [MMM04]. **Electromagnetic** [BH04, CFR00, CM00, Hip03, KDZ09, SW09]. **Electromigration** [BNS04]. **Electronic** [BDS01, DGS03]. **Element** [AG00, Ach02, AADL07, AM09a, AC00a, Ain04, Ain05, Ain07, AR08b, AW09, ALY01, Ani09, ABV06, ACWY00, AR02, AMT04, AM06, AGAN05, BG01, BTZ04, BC06a, BC09, BBP08, BY00a, BFV09, BBG99, BB01,

BGN03, BNS04, BNW06, BBFP07, Bar05b, BP06a, BFP08a, BJM09, Beb07, BFP08b, BSC07, Bel00b, Bel00a, BBM01, BBK01, BSES05, BMPT09, BDRS00, BRS02, BRS08, Ber09, Beu04, BHD06, BG04a, BG05, BR09c, BG04b, Böh08, BHV08, BDW99, Bur05, BFH06, BF09b, Bur09, CK01, CPR<sup>+</sup>03, CLG05, CJ09, CS07, CFR00, Car02, CKNS08, CZZ06, CWL07, CL05a, CDZ00, CW03b, CW03a, Che06, CHX07, CS08, CKK02, CH02, Cod09, DZ09, DS99, DZ08, DK99a, DMC00, Daw06, DDE05, DH07, Dem02, DD07, Dem09, Den08, Deu07, DK08b, DV05]. **Element** [DGHL04, DWZ09, DL03, yDLST06, DLST07, DJLT09, EL08, EHW00, EKS04, ELL02, ELW02, ELS<sup>+</sup>02, FLL<sup>+</sup>06, Fen00, Fen06, FN09b, FN09a, FJMT07, GAT00, GMM07, Gei06, GSWY08, GP99, GLL08, GP00, GM06b, GR07, GSS06, Gue04, Guo06, GS07, Guo09, GZ09, HB00, HhW02, HO08, HR09, Hau08, He03, HTW02, Hel09, HS02, HSS00, HMN02, JRW02, JLM08, Kal00, KSS09, KM03, KLPV01, KT03, KS08a, KS05, Kun01, Lar00, LS07a, LW00a, Liu00, LLK<sup>+</sup>04, Lov05, LCNY08, MST00, MRS00, Mar01, Mar05, MTW02, Mau09, MN05, MS09, NP05, NS01, ORG09, OS07, PF02, PS03, Par01c, PW99a, PW99b, PS08, Pie05, Pro08a, RPK04, Reb07, Ric02, RWG01, RS06, RV06, RWY07, San00b, SS07, Sch00, SW03, Sch05, SS00a, SWL09, SEL09, Sta05, Sta07, Ste05]. **Element** [TT00, TK01, TV05, VW04, Voh07, WY01, WY07, WY05, WY06, Woh00, WK01, WD00, Xu00b, XLC02, XH05, Yan05, Yan06, Zha08, ZaY04, Zho01, dV04, dFN00, dFN02, dFGAN08, dFGAN09, vdVIB07, Dem06]. **Element-Based** [Pro08a]. **Element-by-Element** [DS99]. **Element/Volume** [Mau09]. **Elements** [AD99, AD00, AC00a, AP02, AC03, AR08b, AM08, AW05, AB06, ABF05, BXZ07, BJT00, BNV06a, BNV06b, BDG06, BCDD06, BR05, CZ09, CHO07, Chr05,

CG05a, CG05b, CJRT01, DB03b, DHHN<sup>+</sup>03, GSWY08, HW09a, HR07, Hip03, HN09, HS08, KW06, LZ08, MNS09, MMS03, MPP03, Nic01, Raf05, Ris01, Ste00, TV05, Wan01, WY07, Woh05, Zha09, dVNS07].

**Elimination** [KEN01, SK03]. **ELLAM** [Wan00, WSE01, Wan08]. **ELLAM-MFEM** [Wan08]. **Elliptic** [AGW04, Arb04, AW05, ABCM02, BTZ04, BNT07, Bea04, BMMS05, BMM05, BN07, Böh08, BHV08, BH08, BS09, CMS00, CMMR01, CS02, CW08a, CMR09, CET09, CCPS00, CS05, CHD07, CL05a, CS99, CW03a, CC04, CYL08, CK00, CY07, CKPS01, CG04, CGSS09, CGL09, CMM03, CMMR03, DDP00, Daw02, DH07, Dem09, DV05, DL06, DDP06, DGH03, EP08, EG06b, EG03, FLL<sup>+</sup>06, FK01, FGS07, GG09, GLL08, Gre07, GP07, GH03, HH09, KP03a, KP07, KK09, KLS03, KP03b, KWD02, KK00, Lar00, LN04, Lee99, LMPQ04, LLK<sup>+</sup>04, MKB07, MN03, MMR06, MMR06, MN05, Obe06, ORG09, OS07, Pao07, PS03, Par01b, Par01c, PW99a, PW99b, PZ04, RSS04, RSS07, RWG01, San00b, SV08, Vee01, Ye04, Dem06].

**Elliptic-Parabolic** [AGW04, CHD07]. **Ellipticity** [GS09]. **Embedded** [CGSS09]. **Embedding** [Zha08]. **Enclosing** [JVD02]. **Energy** [BW07, DF09, DE08, EF01, HL00, LN04, LW06b, Reb07, SWW08, WWL09]. **Energy-** [Reb07]. **Energy-Based** [DE08]. **Energy-Conserving** [SWW08]. **Energy-Diminishing** [BW07]. **Energy-Stable** [WWL09]. **Engquist** [BKT09]. **Enhancement** [GT00, ST03]. **ENO** [CZ02, GM08]. **ENO-Wavelet** [CZ02]. **Enrichment** [ABV06]. **Entire** [GMR07]. **Entirely** [Sar03]. **Entropic** [GM05a, MP03]. **Entropy** [LR00, LMR02, LR02, MV03]. **Envelopes** [Bar05a]. **Environment** [ADZ01]. **Epitaxial** [XT06]. **Equality** [Dos05].

**Equation** [AB08, ADZ01, AM06, BC06a, BBP08, BS08, BFV09, BBG99, BP06a, Bea09, BDL04, BBK01, BACCF09, Ber09, BBD02, Bes04a, BB09, BG05, BZ03, BGP05, BDS01, BH04, Bur09, CK01, Cai03, CFFM08, CHX07, CN02, CE09, CG08, CDG08, CKR08, CJRT01, CF07, CP03, Da08, DF09, Den08, DK08b, DGH03, EW00, ER02a, EHR07, FW09a, FN09a, FL03, GK08, GHN03, Gie05, GPPP06, Gou02, Gra08, GSS06, HW03, HS02, HR06, HMN02, HMS03, HV05, IZ09, JRW02, JW06, JR05, KSS09, KK02a, KM06, KPY02, KPY04, KV02, LX09, LaY09, MS01a, MPPS02, Med00, Neg08, NPSK07, Oel02, OPR09, Ovt08a, Ovt08b, PF02, PFF08, PR00, Per09, RPK04, Rin00, RSZ01, RW00, RW07, STWW03, SBBHP04, Sch09, SM08, SP02, She03, SW05a, SW07, TJ00, WJ08].

**Equation** [WWL09, WD00, WML03, XS08, ZLAT08, ZLAT09, oWZ06]. **Equations** [Abg03, AG00, AD99, AMR02, AMR03, AM09b, AAL09, ADZ09, Ayo02, AGAN05, BTZ04, BNT07, Bad05, BHN09, BJ03, BOL00, BJ05, BK00, BHPS09, BBM01, BM06, BY00b, BGM07, BRS02, BF09a, BF08, BCM04, BG04a, BDG06, Böh08, BGMV08, BK03, BPV01, BH05a, BS06, BH07, BL03, Bue07, Buf05, BFH06, BF09b, BT02, BL09, Cai00, CMS00, CMMR01, CX08, CG00, CJ09, CCZ02, CHX03, CWX09a, CHK01, CDZ00, CNQ00, CMX02, CW06a, CM08, CYL08, CWX09b, CH02, CW06b, CDZ03, CE05, CL00, CMM03, DR08, DD04, DK99a, DMC00, Daw02, DM06, DJ05a, Dep08, DZ02, DL03, yDLST06, DL02, EL08, ER02b, EK00, EHL07, FN09b, Fer03, FGNQ02, FG99, FK05, FJMT07, FL05, GHV00, GS09, Ger08, GFD00, GR09, GPD04, GLQZ02, GMS05, GP09].

**Equations** [Gug01, GGGS08, GL00, HL00, Han06, HO08, Hau02, Hau08, HJ03, HL02, He03, HS07a, HMS02, HMY07, HL03a, HL03b, HL09b, HZ03, JKR01, JVD02, JW00a, JW00b, JPCH06, JPT00, JLM08, KN00, KOT05, KR00, KR05, KLR06, KU02, KMS05,

Kwe00, LF99, LW06a, LLRZ00, Lin09, Liu00, LL00, LY02b, LBD<sup>+</sup>03, LMTY04, LPWE05, LW07, LZ07, LR02, LS07b, LL06, Luc08, LCNY08, MS00a, MST05, MSZ08, MMRR06, MMR06, Med07, MV03, MT05, NT02, Nic01, NTW08a, NTW08b, NP05, NS05, Obe06, ORG09, OZ08, PYD06, Pao07, PPT05, PS04, Pfl00, Pro08b, QZZ07, Reb07, Reu03, Ric02, Rin01, RV06, Röß09, SV05, STWW03, SSTT05, San00b, SS08, SV08, SN04, Sch02a, SV03, SV00, She03, SL06, SD09, SEL09, Sta05, SW09, Ste03, Sze04, SD02, TT00, Tha08, TW06]. **Equations** [TF04, TCOZ03, VV08, VW04, Van05, Ven09, Ver05b, Ver05a, Voh07, Waa08, Wan00, WSE01, Wan07, WM08, Xu00a, YS02, Yan05, YA05, ZB00, dFN00, dFGAN08, dFGAN09, vPS03, Tha06]. **Equilibria** [LW04]. **Equivalence** [DLM07, Thü08]. **Equivalent** [AK07]. **Equivariant** [Thü08]. **Ergodic** [SS00b]. **Erickson** [BFP08b]. **Erratum** [BX07]. **Error** [AD00, Ain05, Ain07, AR08b, ALY01, AMR03, Arm01, AKW05, BS07, BX03a, BX03b, BMN04, BJ05, BK00, BK02, BR09a, BDR09, BH09, Bos07, BGP05, Bue07, Bur09, CK06a, CZ09, CTU09, Cao05, Cao07, CET09, Car02, CLT05, CHO07, CCPS00, CL05a, CD01, CEJS02, CC04, Che06, CH02, CW06b, CG08, DDP00, DDE03, DMO07, DB03b, Dem09, DLM09, Dep08, Deu07, DV08, DL09b, DL02, DHHN<sup>+</sup>03, DL08b, EP08, ELS<sup>+</sup>02, FV03, For08, FW09b, GHV00, GMR07, GW07, GM00a, GR07, GMS05, GS05, HW09b, HB00, Hau02, HK09, HR07, HL09a, HH09, HPS05, HMN02, HV05, HW05, JCK08, JRW02, JR05, KP03a, KPS06, Kop01, Kop03, Kop08, Kun01, Kup06b, Küt01, LN05, Lar00, LN04, LWW00, LY01a, LY01b, LY02b, LY02a, LBD<sup>+</sup>03, LLK<sup>+</sup>04]. **Error** [LMTY04, LY09b, LW04, LCNY08, MS01a, MN03, MNS09, Mel05, Mer08, MPP03, NZ04, Nic05, Nic06, NSV05, OPR09, OP00, PJ02, RSS07, RWG01, RW07, RV06, San00a, Sch00, SW03, Sch05, SW04b, SD05, ST03, Vee01, Ver05b, Ver05a, Ver09, Voh07, Wan00, WSE01, Wan08, WJ08, Wet00, WY05, WML03, ZS04, ZS06, dFGAN08, vdVIB07, Dem06, Dar00, dVNS07]. **Error-Correcting** [Kup06b]. **Errors** [CI06, JL02, KEN01, RSS04, SK03, SE05]. **Estimate** [AKW05, BGP05, Cao07, Car02, CW03a, Des04, EP08, For08, HR07, HW05, Kop08, Wan00, WSE01, Wan08]. **Estimates** [AD00, ALY01, Arm01, BK00, BR09a, Ber09, BDR09, BBD02, CK06a, CLT05, CL05a, CC04, Che06, CH02, CW06b, CG08, DB03b, Dem09, DLM09, Deu07, DKIK07, DL02, DHHN<sup>+</sup>03, DL08b, ELS<sup>+</sup>02, FW09b, GHV00, GW07, GM00a, GS05, HB00, HK09, HH09, JRW02, KP03a, Kop01, Küt01, LN04, LWW00, LY01a, LY02b, LY02a, LBD<sup>+</sup>03, LMTY04, LY09b, LCNY08, MS01a, MN03, MNS09, Mer08, MPP03, NZ04, Ovt03a, Ovt03b, RPK04, RSS07, RWG01, Sch00, SW03, Sch05, SD05, Ver05b, Ver05a, Ver09, Voh07, WW07, WJ08, WY05, WML03, ZS04, ZS06, Dem06]. **Estimating** [KHY09]. **Estimation** [Ain05, Ain07, BH09, Bur09, Car05, HPS05, LY02a, Mel05, OPR09, RSS04]. **Estimations** [Nic05, Nic06]. **Estimator** [CZ09, Kun01, LW04]. **Estimators** [BX03a, BX03b, DDP00, FV03, HL09a, LY01b, LLK<sup>+</sup>04, NSV05, PY04, Vee01]. **Euler** [AS05a, BDR09, DK99a, DLV08, DPR06, HMS02, PYD06, RPK04, Reu03, San09, TJ00, TW06, Xu00a]. **Euler-Mixed** [DK99a]. **Euler-Type** [HMS02]. **Eulerian** [WW07]. **European** [JD04]. **European/American** [JD04]. **Evaluation** [AGH00, BR09a, CT00, EE06, GMR07, HV06]. **Evolution** [BG04b, Han06, PF02, PFF08, oWZ06]. **Evolutionary** [CHS00, HS00, HL03b]. **Evolutions** [CM01]. **Exact** [BX03a, BX03b, SBBHP04]. **Exclusion**

[SN04]. **Existence** [CW06a, DR08, FL05, Hel09, KDN00, KD03, Ker00, Ort09, Vas01]. **Expanded** [WD00]. **Expansion** [Boy02, Kop03, NS09, Rin00, Sch00]. **Expansions** [FLL<sup>+</sup>06]. **Explicit** [BJ03, CLT05, Des04, Des09, Dic07, Hel09, HO05, SV00, SL06, VV09, WB00, YA05]. **Explicit-Implicit** [SL06]. **Explicit-Jump** [WB00]. **Exponential** [BOS05, CI06, CV05, HMY07, HO05, HOS09, IZ05, LS06b, Tha08, Tha06]. **Exponentially** [BGMV08, Pin04]. **Expressed** [DR05]. **Extended** [HTCP09, HR09, HRW01, SV00, Ste07]. **Extension** [DGS08, DGS09]. **Extensions** [CGLGP08, GZ09, MST06]. **Exterior** [Deu07, MGP00, MS00b, SW07]. **Extrapolation** [FLL<sup>+</sup>06, He03, Sid00]. **Extrapolations** [LL00]. **Extreme** [Ovt08a, Ovt08b].

**Faber** [BR09a, FLT08]. **Factored** [Beb07]. **Family** [AW05, Wan08, Zha09, dVNS07]. **Far** [KN00]. **Farin** [AS05b]. **Fast** [AM09b, BL05, CX08, CWX09a, CFFM08, CMX02, CWX09b, Chu00, CF07, EL08, For09, HDVV09, HW03, KOT05, LMPQ04, QZZ07, Sar03, Sto09, ST06, TCOZ03, Dar00, Sar03]. **Fast-Marching** [CFFM08]. **FD** [BF08]. **FE** [RBX08]. **Feasibility** [Dos05]. **Feedback** [LWX00]. **Fekete** [TWV00]. **FEM** [BMN02, Beu02, GH00, GHS03, HO09, HM06, MGP00, MS00b, MNS00, Say09]. **FEM-BEM** [HM06]. **FEMs** [CT00]. **FETI** [DDP06, KL05, Kim08b, KWD02, KRW08, TK01, TV05, kDH07]. **FETI-DP** [DDP06, KL05, Kim08b]. **Few** [Vic04]. **Fickian** [ELS<sup>+</sup>02, RS06]. **Fictitious** [HR09]. **Fidelity** [Nik02]. **Field** [BNS04, BH04, CN02, Cod09, Du00, FW09b, HL02, HS02, KN00, NS09, SW09, WWL09]. **Fields** [WTW00]. **Fifth** [WS07]. **Fifth-Order** [WS07]. **Filippov** [DL09a]. **Film** [BGN03, BNW06, BHN02]. **Filtered**

[RF03]. **Finance** [WF08]. **Finding** [Lin06, WZ04, YZ07]. **Fine** [HS07b]. **Fine-scale** [HS07b]. **Finite** [AG00, AADL07, AM09a, AC00a, AP02, Ain04, Ain05, Ain07, AR08b, ADZ01, ALY01, AGW04, Ani09, AM08, ABV06, ACWY00, AB06, ABF05, AR02, AMT04, ADGK03, AM06, AGAN05, BG01, BTZ04, BC06a, BC09, BBP08, BY00a, BFV09, BBG99, BB01, BGN03, BNS04, BNW06, BBFP07, Bar05b, BP06a, BFP08a, BJM09, Bea09, Beb07, BJT00, BFP08b, BSC07, Bel00b, Bel00a, BBM01, BSES05, BMPT09, BDRS00, BRS02, BNV06a, BNV06b, BRS08, BLS<sup>+</sup>05a, Ber09, Beu04, BHD06, BG04a, BG05, BDG06, BG04b, BCDD06, Böh08, BHV08, BZ03, BGP05, BH08, BDW99, BLS05b, BWWW08, Bur05, BFH06, BF09b, Bur09, CK01, CPR<sup>+</sup>03, CLG05, CJ09, CS07, CMR09, CFR00, Car02, CLT05, CHO07, CKNS08, CHD07, CZZ06, CL05a, CDZ00, CW03b, CW03a, Che06, CHX07]. **Finite** [CS08, CKK01, CKK02, CY07, CH02, CDZ03, CE05, CG05a, CG05b, CKR08, Cod09, CJRT01, CV05, Cou09, DZ09, DZ08, DK99a, DMC00, Daw06, DDE05, DH07, DDO07, DB03b, Dem02, DD07, Dem09, Den08, Des04, Deu07, DK08b, DV05, DM08, DGH03, DGHL04, DJ05b, Du08, DWZ09, DL03, yDLST06, DLST07, DJLT09, DHHN<sup>+</sup>03, EL08, EHW00, EKS04, EP08, ELL02, ELW02, ELS<sup>+</sup>02, EHL07, FLL<sup>+</sup>06, Fen00, Fen06, FN09b, FN09a, Fil01, FG99, GHV00, GAT00, GMM07, GLY00, Gei06, GSWY08, GP99, GLL08, GP00, GR07, GSS06, Gue04, Guo06, GS07, Guo09, GZ09, HB00, HhW02, HO08, HR09, Hau08, He03, HTW02, Hel09, HR07, Hip03, HR06, HSS00, HMN02, HS08, JJ06, JRW02, JLM08, Kal00, KSS09, KM03, KLPV01, KK02a, KW06, KU02, KT03, KS08a, KS05]. **Finite** [Kun01, Lar00, LS07a, LW00a, LZ08, Liu00, LLK<sup>+</sup>04, Lov05, LCNY08, MRS00, MNS09, Mar01, Mar05, MTW02, Mau09, MMS03,

MN05, Mer08, Mic03, MPP03, Mis05, MS09, NT02, Nic05, Nic06, NP05, NS01, ORG09, OPR09, OS07, PF02, PS03, Par01b, Par01c, Pie05, PZ04, Pro08a, RPK04, Reb07, Ric02, RWG01, RS06, RV06, RWY07, SFNW05, San00b, SS07, Sch00, SW03, Sch05, SS00a, SLS09, SEL09, Sta05, Sta07, Ste05, TT00, TV05, VW04, Voh07, Wan01, WY01, WY07, Wen05, WN00, WY05, WY06, WB00, WWL09, Woh00, WK01, Woh05, WD00, Yan05, Yan06, Ye04, Ye06, YA05, Zha08, Zha09, ZaY04, Zho01, dV04, dVNS07, dFN02, dFGAN08, dFGAN09, vdVIB07, Dem06].

**Finite-** [MRS00]. **Finite-Difference** [ADGK03, WWL09]. **Finite-Dimensional** [Du08]. **Finite-Element** [Ani09, AGAN05, Bar05b, GAT00, GLL08, Pie05, dFGAN08, dFGAN09]. **First** [Abg03, ACS09, BBM01, BMMS05, BMM05, CMMR01, CS02, CS03, CMM03, CMMR03, DS07, DV05, Gue04, HSS00, KEN01, Lee99, LMW06, LMW08a, MMM04, MMSW06, Rin01, RLK09, SK03, SE05, Sta05, SD02, KMM00]. **First-Order** [ACS09, BMMS05, BMM05, CMMR01, CS02, CS03, CMM03, CMMR03, DS07, Gue04, HSS00, Lee99, LMW06, LMW08a, MMM04, MMSW06, Rin01, RLK09, Sta05, KMM00].

**Fits** [LS09]. **Fitted** [Pin04]. **Fitting** [AGY05, CI06]. **Fixed** [Seg02]. **Flames** [KB02]. **Flexible** [SS03a]. **Floquet** [Moo05]. **Flow** [AC00a, BBFP07, BDL06, BFP08b, CLW04, Cha07, CG09, DS07, DGS01, ELM00, EM03, EL07, EJS09, FN09b, KT08, LN05, LSY03, Lee04, MTW02, Mic03, MX07, NV04, Nou01, PW99b, QVZ01, RLK09, Wan08, WD00, DGS03]. **Flows** [CHD07, DZ09, Deu07, ELS<sup>+</sup>02, Fen06, GR07, GH05, GS03b, GM00b, Hun01, KT05, LV04, LW00b, LW06b, Man06, PS08, RY05, SST03, VO02]. **Fluid** [CLW04, CHD07, DGHL04, EM03, Fen00, Fen06, FVV08, GMM07, KV02, LSY03, Lee04, Med02, MT04, MX07, Nou01, SSTT05, WY07].

**Fluid-Rigid** [SSTT05]. **Fluid-Solid** [Fen00, GMM07]. **Fluid-Structure** [DGHL04]. **Fluids** [BRLM03, BDR09, DPR06, LV04, PYD06, PR01]. **Flux** [AJG04, AW05, BKT09, CT00, CKK02, Mis05, Tow00, Tow01, WY06]. **Fluxes** [Bre05, CGW07, LW04, XZ05]. **Focusing** [BJ03]. **Fokker** [BDS01, Den08, Wan07]. **Force** [GR07]. **Form** [BG04b, MP02b]. **Formation** [BGR02]. **Forms** [RB09, Sch05]. **Formula** [KHY09, dB03a]. **Formulae** [BP05, HX00, HS09, Vic04]. **Formulas** [BNV06b, Ber02, BD07, CN02, GM09, HT08, Peh09]. **Formulation** [BMN04, BSES05, BACF06, BC06b, CS03, Cod09, EKS04, FN09b, GH00, KL05, Kim08b, Lin08, LCNY08, MP03, MGP00, MV03, NPSK07, PW06a, SWW08, STWW03, SS09, VVD06, WN00].

**Formulations** [BC09, Che00, RSS07]. **Forward** [MSZ08, San09]. **Forward-Backward** [MSZ08]. **FOSLL\*** [CMMR01, LM07]. **FOSLS** [BMMS05, BMM05, KMM00, LMW06, LMW08a].

**Foundations** [LMPQ04]. **Fourier** [DGS03, Sar03, BH05b, CX08, DGS01, HL09b, KS08b, LSX08, LL06, MG03, NS01]. **Fourier-Wavelet** [KS08b]. **Fourth** [BC05, BGM07, DS09, Jün01, MKB07, Mar05, Tha06]. **Fourth-Order** [BC05, DS09, Tha06]. **Fractal** [CK06b]. **Fractional** [Den08, EHR07, Ger08, LX09, SL99, THBS09, Ven09, YA05, ZLAT09].

**Frames** [Ste03]. **Framework** [BG01, BC06a, CHO07, CKK01, FV04, Guo06, Par06]. **Frankel** [MPPS02]. **Fredholm** [DM06, LZ07, PPT05, VV08]. **Free** [ACPC02b, BLS08, BWWW08, CS07, CCS06, FJMT07, HW09a, Her03, HO09, Obe06, Ris01, San00a, Ver09, Wen09, Zha09, dV04, GM06a, Tha06]. **Frequency** [BRS02, BGS05, CWL07, SM08, THBS09]. **Frequency-Based** [THBS09]. **Friction** [HR07, HL09a, RC01]. **Friedrichs**

[Bre03, EG06a, EG06b, EG08, Küt01].  
**Frobenius** [JK09]. **Front** [Cha07, GLL<sup>+</sup>03].  
**Front-Tracking** [Cha07]. **Fully** [AR08b, BZ02, Böh08, CE05, DDE05, Fen06, FN09b, FN09a, GGGS08, LMR02, MS02, MS00b, NSV05, PR01, SWL09, dFGAN09, BNV06b].  
**Function** [AJG04, Che02, GMR07, Hla01, HS07b, LS06b, Mis05, Ova07, PD05, ST07, SH08, TWB07]. **Functional** [MRS00, WM08]. **Functionals** [ABFM04, Bad06, CU05, GM05b, SBBHP04].  
**Functions** [AGG06, AM09a, AR08a, ACDD05, BG01, BT00, BR09a, Bre03, CK01, CZ02, CK06b, CGH05, CS01, CN01, Dic07, Dic08, EE06, FV03, GMR07, Guo06, HHT08, HM07, KHY09, Mel05, Nik02, Ova07, PW06b, PW09, RW05, RHA03, Seg02, She00, SWL09, SVW02, ST06].  
**Future** [CL00]. **FV** [MV03].

**Galerkin** [CGL09, LY09a, AG00, Ain07, ADF09, ADZ09, ABCM02, AD02, AM09c, BTZ04, BS07, BJM09, BK02, BPD08, BS06, BHS06, BP06b, BF09b, BS09, CX08, CFR00, CCPS00, CS05, CCS06, CWL07, CD01, CC04, CYL08, CT00, CW06b, CE06, CE09, CKPS01, CKSS02, CGW07, CG08, CGSS09, CG09, CGL09, CHR04, Daw02, DMO07, DS09, DL02, EK09, EG06a, EG06b, EG08, FK01, FW09a, GAT00, GSWY08, GM06b, GSS06, GP07, Har07, HKW09, HL09b, HPS04, KP03a, KP07, KSS09, KV02, Kwe00, LN04, LS07a, LV04, LLRZ00, LMTY04, LSTZ07, LZ07, MS00a, MS01a, MST00, MS01b, MS02, Maj05, MTW03, OD09, OS07, PF02, DEG08, RS06, SSTT05, SS00a, She03, SW07, SW05b, VVD06, Wal05, WH08, XS08, YS02, Yan05, ZS04, ZS06, oWZ06, vdVIB07].  
**Gamma** [BBMZ09, ST07]. **Gas** [Aza02, B JL03, CKR07, Vas01]. **Gauge** [NP05]. **Gauss** [BHM09, Hel09, LF99, PP00, Peh09, Reu03, dP07]. **Gaussian** [Bal03, BP05, DK99b, HC09, KS08b, PD05].  
**Gegenbauer** [BY00b, CW08b]. **General** [AAL09, BX03b, Ber02, BHMR07, CCZ02, CKK01, CKR08, DWZ09, EHL07, FS04, GHV00, GM08, GPHA07, HM07, KV02, MN05, MV03, Spi07, Wen05, EG06a].  
**Generalization** [Lu99]. **Generalizations** [GH03, Lu99]. **Generalized** [BT00, Bal03, BZ03, CFFM08, CK06b, DPR06, EJS09, For09, GKS00, GH05, HC09, IZ05, LL06, Ovt03a, Ovt03b, PW06b, SH08, SdS06, WML03, vdVIB07]. **Generalizing** [FV04]. **Generation** [Aza02, CMMR03].  
**Geometric** [BGP05, CM01, DL05, Hac07, KZ04, Sch02a].  
**Geometrical** [JW06, Sto09].  
**Geometrically** [MMSW06]. **Geometry** [DWZ09]. **Geophysics** [ET05].  
**Geostrophic** [Med00]. **Gilbert** [BBP08, BP06a]. **Ginzburg** [CD01, TJ00].  
**Global** [AG03, BHN02, DK00, EJR08, LMR<sup>+</sup>05, LLK<sup>+</sup>04, San00a]. **Globally** [LF99, PW09]. **GMRES** [Olv09]. **Goal** [MS09]. **Goal-Oriented** [MS09]. **Godunov** [AJG04, CGLGP08, JJ06, MP02b, Nou01, QS08]. **Godunov-Type** [AJG04, QS08].  
**Good** [KJ03]. **Governed** [BZ02, CYL08, LY02b, LMTY04]. **Gradient** [AB03, DG00, HTW02, IKT01, Ova07, WZ07]. **Gradients** [BK01, Bes08, Ovt08a, Ovt08b, Rie05, Dem06]. **Graining** [KPS06].  
**Graphs** [BMN04, BL00, DDE05, LN05].  
**Green** [HS07b]. **Grid** [Aza02, Bea04, CMS00, CMX09, CMMR03, Dos04, LMPQ04, MX07, NV04, Neg08, NTW08a, NTW08b, Not07, TZ99].  
**Grid-Based** [Bea04]. **Grids** [AAL09, ACWY00, BX03a, BX03b, BXZ07, Bel04, BHL03, BR09c, CK00, CKK01, CKPS01, Des04, Gra08, Gre07, Gro08, KK02b, Küt01, LW00a, RBX08, RWY07, SFNW05, Sch00, Zha08, Zha09]. **Ground** [BW07, Daw06]. **Groups** [Mar99]. **Growth** [BHN02, HW09b, HV05, XT06]. **Guided** [PJ01, PJ02]. **Gurtin** [BIMV08, KK02a].

**H** [EG03, HX07, WY07]. **H-Convergence** [EG03]. **Haar** [JK09]. **Half** [Bal03]. **Half-Range** [Bal03]. **Halton** [HZ07]. **Hamilton** [Abg03, AM09b, BJ05, BL03, CG00, CJ09, Fer03, GP09, JKR01, KOT05, Lep00, Obe06, SV03, SD02, TCOZ03, Waa08, WF08]. **Hamiltonian** [CCF09, HK01, JW06, KB02, MRT02b, WJ08]. **Hamiltonian-Preserving** [JW06, WJ08]. **Hammerstein** [CWX09b]. **Handling** [LMR<sup>+</sup>05]. **Hardening** [AC00b]. **Hardy** [BT07, HN09]. **Harmonic** [BBFP07, Bar05b, BDL06, BRS02, CDS03, CM00, GPD04, HMN02, HTW09, Pie05, Sid00, VO02, CL05b]. **Hat-box** [Kup06a]. **Heat** [Ber09, ETW08, Küg03, SL06, XZ05]. **Helicity** [LW06b, Reb07]. **Helicity-Conserving** [Reb07]. **Helmholtz** [ADF09, BDL04, CCZ02, FW09a, HM06, SW05a, SW07]. **Hereditary** [SW00]. **Hermite** [AR08a, Bal03, BX02, BX07, GS00, MST05]. **Hermitian** [CYN00, EL09, Ovt08a, Ovt08b]. **Hessenberg** [LS05, LS02]. **Hessian** [Ova07]. **Heterogeneous** [Buf05, DZ09, KWD02]. **Hexagon** [LSX08]. **Hexahedra** [AC03]. **Hierarchic** [AC03]. **Hierarchical** [Beb07, LSTZ07, SSZ07]. **High** [AC00a, Ain04, ADBN08, Bar09a, Bes08, BGS05, BL03, CGLGP08, CNPS07, CWL07, Dic07, Dic08, Dos04, Ger08, LR00, PZ04, RS04, SM08, SW05a, SSZ07, SR02, Tha08, Vic04, Zho01]. **High-Dimensional** [Dic07]. **High-Frequency** [BGS05]. **High-Lying** [Bar09a]. **High-Order** [ADBN08, Bes08, BL03, CNPS07, LR00, RS04, SR02, Tha08]. **Higher** [BNV06a, BNV06b, BH05b, Car05, CE09, CJRT01, Dem09, KD03, RB09, Sch09, She03]. **Higher-Order** [BH05b, Dem09]. **Highly** [BS07, CCF09, HV06, SS08]. **Hilbert** [BY00b, Egg06, KF03, KK09, MP01, Mat04]. **Hilliard** [BBG99, BB01, Fen06, KSS09]. **HJB** [BZ03]. **Hodge** [DDO07]. **Holm** [CKR08, HR06, XS08]. **Holonomic** [Jay07]. **Homogeneous** [GS03a, RW07]. **Homogenization** [CS08, OZ08]. **Homotopies** [SVW04]. **Homotopy** [LWW02]. **Hopf** [GKS00]. **Horner** [Peñ00]. **Howard** [BMZ09]. **hp** [BCDD06, BS06, HSS00, AC00a, Ain04, SS00a, AP02, Mel05, SST03]. **hp}-Approximation** [AP02]. **hp}-DGFEM** [SST03]. **hp}-Discontinuous** [BS06]. **hp}-Finite** [HSS00, AC00a]. **hp}-Interpolation** [Mel05]. **hp}-Version** [Ain04, SS00a]. **Hybrid** [CHX03, CKK02, LV08a, YD08]. **Hybridizable** [CG09]. **Hybridization** [CG05a, CG05b, CGL09]. **Hybridized** [CG04]. **Hydrostatic** [BK03]. **Hyperbolic** [ADBN08, AMT04, Aza02, BC05, BHL03, CLG05, CHK01, CD04, CGH05, Cou09, HSS00, JJ06, JV03, MP02b, Mor01, NP00, OS07, Par01a, Ric02, TT03, Zho01, Par06]. **Hyperelasticity** [GH00]. **Hyperplane** [PDP06]. **Identification** [Bur01, BM02, Kal00, Küg03]. **II** [BX03b, BBK01, BNV06b, BRLM03, BMM05, BB09, CG05b, Da08, DGS09, EG06b, GT00, Guo09, KS01a, LV08b, MS02, Ovt03b, Ovt08b, PS02b, Par01c, PW99b, PJ02, Sch00]. **III** [DMC00, EG08, Maj05]. **III** [AMR02, BK06, CL00, FSL05, Kal00, Mat04, PS05, Rin01]. **III-Posed** [BK06, CL00, FSL05, Kal00, Mat04, PS05, Rin01]. **III-Posedness** [AMR02]. **Image** [ABFM04, DM08, MG01, VO02]. **Images** [AGY05]. **IMEX** [Bos07]. **Immersed** [GLL08, WB00]. **Immersed-Interface** [GLL08]. **Immiscible** [Mic03]. **Immunology** [Luc08]. **Impact** [PS02a, PS02b]. **Impedance** [MMM04]. **Impenetrable** [CM00]. **Imperfect** [BJJ02]. **Implicit** [BBP08, BP06a, Bar09b, Bea09, BDR09,



BF09a, Bre05, CM08, CW08d, DER07, EB08, Hun01, Jay00, JJ06, KT08, PFF08, PR01, RPK04, SL06, TW06, ZLAT08, DPR06]. **Implicitly** [DD07]. **Importance** [Kaw08]. **Improved** [Bar09a, ETW08, GLL<sup>+</sup>03, Men06, Sch05, dFN00]. **Impulse** [SS08]. **Inclusion** [Bar09a, LaY09]. **Inclusions** [AKKL05, San09]. **Incompressible** [AG00, BJM09, Bel00b, BDR09, CLW04, CG05a, CG05b, DZ09, DW09, ELM00, EHL07, FVV08, GR07, GS03b, LW06a, LW07, PR01, Pro08b, SV05, SST03]. **Increment** [Wet00]. **Indefinite** [AB03, Ait05, BS07, Mis05]. **Independence** [FQ00, PW06b, WSD05]. **Independent** [AK07, Rin09]. **Index** [KMS05, LS02, Sch02a]. **Index-2** [LS02]. **Induced** [SM08]. **Inelastic** [RW07]. **Inequalities** [BTW03, Bel00a, BZ02, Bre03, HS00, LR00, NZ06, Sch00, kDH07]. **Inequality** [EKS04]. **Inertial** [IK08]. **Inexact** [An05, IC00, Dos05, Jay00, PSWS08, Rie05]. **Inf** [BMN02, FJMT07]. **Inf-Sup** [BMN02, FJMT07]. **Infinite** [ASXZ08, CW08d, DK99b, Du08, GPHA07, HN09, LPSS00]. **Infinite-dimensional** [Du08]. **Infinity** [GS09]. **Infinity-Dimensional** [GS09]. **Inflow** [Kwe00]. **Ingham** [NZ06]. **Inhomogeneous** [BH05b, CM00, MMS03]. **Initial** [BK03, CG08, CKR08, Cou09, HMS09, KW01, Pal04, Rod07, SEL09, Spi07]. **Inner** [BCT00, Beu02, Rie05, SS03a]. **Inner-Outer** [SS03a]. **Input** [BNT07, NTW08a, NTW08b]. **Inscribed** [Can05]. **Inspired** [HR09]. **Instability** [SM08, WS07]. **Integral** [AAL09, Bea04, BH05a, BH04, CX08, CHX03, CWX09a, CHK01, CMX02, CN02, DD04, DM06, HS02, HMN02, KK02b, LZ07, SV00, SW09, VV08]. **Integrals** [BL01, BL05, HHT08, HS09, HV06, HC09, ST07]. **Integrated** [PJ01, PJ02]. **Integration** [BCM04, BS03, CO02, CN01, Dic07, DV08, EF01, Hel09, JPCH06, MRT02b, MT05, NJN07, Pal04, PDP06]. **integrator** [Tha06]. **Integrators** [BOS05, GFD00, HL03a, LMW08b, SS00c]. **Integro** [BPV01, BH07, CJ09, CP03, LLRZ00, PPT05, SEL09]. **Integro-Differential** [BPV01, BH07, CP03, LLRZ00, PPT05, SEL09]. **Integro-Partial** [CJ09]. **Integrodifferential** [BS06, vPS03]. **Interaction** [DGHL04, Fen00, GMM07]. **Interface** [BEL08, CZ09, CZZ06, Fen06, GR09, GLL08, SFNW05, WB00]. **Interfaces** [FGS07, Say09, TZ99]. **Interior** [ByS06, BLS08, BPD08, Bur05, BFH06, BZ06, Bur09, CW03a, DZ09, EK09, HKW09, Sch00]. **Intermediate** [KJ03]. **Intermediate-Rank** [KJ03]. **Internal** [Cao05, DK08a]. **Interpolation** [ACDD05, AL09, BH09, BX02, Cao05, Cao07, CK06b, DS02, DB03b, DL08b, FW09b, GM06a, GS00, Han08, HK09, Ker00, KZ04, LSX08, LLF01, LY02a, MNS09, Mar99, Mel05, PY04, PD05, Sar03, Xu03, BX07, VV08]. **Interpolations** [Cod09]. **Interpolatory** [GS05, LM06]. **Intersecting** [SVW04]. **Interval** [BP05, Boy02, LaY09]. **Intervals** [DV02, GPHA07]. **Intrinsic** [CO02]. **Invariant** [HX00]. **Inverse** [BG01, BHM09, BHR07, CHR04, DL08a, Hac07, HR00, MP01, RS00, SS03b]. **Inverses** [Du08, Slo04]. **Inversion** [RF03, WT06]. **Inverting** [LFPS06]. **Involving** [FSL05, Nik02]. **Ionic** [BDS01]. **Irreducible** [SVW01]. **Irregular** [BACCF09, BHL03, KRW08, Sch00]. **Irregularly** [AGY05]. **Isentropic** [Vas01]. **Isoparametric** [AD00, DHHN<sup>+</sup>03]. **Isothermal** [BJL03]. **Itô** [Röβ09]. **Iterated** [BH05a, KW01]. **Iteration** [ALNO07, PS04, RP02, Rie05]. **Iterations** [Jay00]. **Iterative** [BHN09, BEL08, Bur01, DK08a, Den03, EL09, Huh01, Lu99, Med02, MT04, PW99a, PW99b, WTW00, Egg06].

**Iteratively** [BHM09].

**J** [DGS03]. **Jacobi**

[BJ05, CJ09, WF08, Abg03, AM09b, BL03, CG00, CW08c, Fer03, GP09, Guo06, JKR01, KOT05, Lep00, Obe06, Ovt08a, Ovt08b, SV03, SD02, TCOZ03, Waa08].

**Jacobi-Weighted** [Guo06]. **Johnson**

[Say09]. **Joint** [FR08]. **Joseph** [GR09].

**Jump**

[CV05, GLL08, Hau08, sQlXsJjB05, WB00].

**Jump-Diffusion** [sQlXsJjB05]. **Jumps**

[LL00, MSTZ08].

**Kaczmarz** [BK06]. **KDV**

[She03, LL06, YS02]. **Keller** [BCC08, EK09].

**Kelvin** [BG05]. **Kernel**

[Da08, Sch07, Wen09]. **Kernel-Based**

[Sch07]. **Kernels**

[AGH00, BPV01, CHX03, Lin06, PPT05].

**Killed** [Men06]. **Kind**

[CMX02, LZ07, SV00]. **Kinetic**

[ADN00, BHN02, DJ05a, GT03, Jun00, MP03, WN00]. **Kirchhoff**

[ACPC02a, Per09, dVNS07]. **Knots** [Rab00].

**Kolmogorov** [Cai03]. **Korobov** [WSD04].

**Korteweg** [MS01a]. **Kronrod**

[PP00, dP07]. **Krylov** [Bad05, BWWW08, EE06, KDZ09, LS05, LW03, SS03a]. **Kutta**

[Bos07, BB00, BT02, BS03, CM08, CG08, DK08a, DMO07, DHV00, FS04, Gug01, HO08, Hig05, Hig06, HO05, Jay00, Jay07, Röß09, RS04, Sch02a, ZS04, ZS06].

**L** [Gue04]. **L2** [yDLST06]. **L2-Projected**

[yDLST06]. **Lagrange** [AG00, ADF09, BXZ07, BK02, BRS02, HSY04, LLF01, Mar05, SV02, SSTT05, Woh00].

**Lagrangian** [Ayo02, Bes04b, Bes08, CS05, CF07, Fer03, Gui03, WW07]. **Lagrangians**

[Dos05]. **Laguerre**

[ASXZ08, BBC08, She00]. **Landau**

[BBP08, BP06a, CD01, EW00, TJ00].

**Laplace** [DD07, Dos04, LS06a, LFPS06,

OPR09, WT06]. **Laplacian**

[DK08b, Ju00, LY01b, LY02a]. **Large**

[Bad05, BM06, BIR09, FW09a, Fer03, JL02, LR02, QS08, RP02, SD09, XT06].

**Large-Scale** [Bad05]. **Lattice**

[JY09, KPS06, KJ03, SKJ02, WSD04]. **Law**

[Hla01, Mis05, TW07]. **Laws**

[AJG04, AR08a, ADN00, AMT04, BC05, BHL03, Bre05, BKT09, CLG05, CGLGP08, DMO07, GM00a, yGpMT01, Kim02, LV08a,

LV08b, LRR00, LW00c, MP03, Mic02, Mor01, MV00, NP00, Par01a, QS08, ThT00, TT03, Tow00, Tow01, WN00, ZS04, ZS06].

**Lax** [Küt01]. **Layer** [CL05b, Med00, ST03].

**Layers** [BDL04, BDL06, CW03b]. **Leapfrog**

[KN08]. **Least**

[Arm01, ACS09, AM06, BY00a, BMMS05, BMM05, BG05, Cai00, CS02, CS03, CS04, CLW04, CK06a, CW08a, CMM03,

CMMR03, DKS02, DS07, DL03, yDLST06, DLST07, GHS03, HDVV09, KMM00, KLS03,

KS05, Lee99, LMW06, LMW08a, Lin08, MMM04, MS01b, MS02, Maj05, MRS00,

MMSW06, RLK09, Sta05, Sta07, Tha00]. **Least-Squares** [AM06, BY00a, BG05,

CS04, CLW04, CK06a, CW08a, DS07, DL03, yDLST06, DLST07, KLS03, KS05, Lee99,

LMW08a, Lin08, MS01b, MS02, Maj05, MRS00, RLK09, Sta07]. **Leffler** [SH08].

**Legendre** [ASXZ08, CYL08, MS00a, MS01a, Par01b, Par01c, SW04b, WML03]. **Leibniz**

[dB03a]. **Lemma** [Chr05]. **Leslie** [BFP08b].

**Less** [DKW08]. **Level**

[FK01, He03, KW06, KT09, SGM01]. **Lévy**

[CV05, Kaw08]. **Liapunov** [BGR02]. **Lie**

[EF01, Mar99, Ran08]. **Life** [KK02a].

**Life-Span** [KK02a]. **Lifshitz**

[BBP08, BP06a, EW00, FL03]. **Like**

[Ber02, BGMV08, CJ09]. **Limit**

[DLV08, KGDD05]. **Limits** [LR02]. **Line**

[AG09, Ovt08a, Ovt08b]. **Line-search**

[AG09]. **Linear**

[ACS09, AM06, BOL00, Ber02, BF09a, BB09, BHV08, BGP05, BH08, BPV01, Bue07,

CS03, CDS03, CS04, CLW04, CZ09, Cao05, CH02, CHR04, DF09, Des04, Des09, DK08b, DS09, DZ02, DGHL04, ELL02, FLT08, FQ00, GM09, GS03a, GPHA07, GKK03, GP07, GH03, HDVV09, HTCP09, HM07, HRS03, IKT01, JW00b, KMM00, KS01b, KK00, LLRZ00, LRV00, LMW08b, Mat04, MST06, MN05, Mer08, Pao07, PW06a, PW99a, PW99b, PW06b, SBBHP04, Sch09, SW03, SW00, SD05, Sto09, Van05, Wan00, WS07, dFN02, Dem06, LLK<sup>+</sup>04, San00b). **Linearization** [JPCH06, San00b]. **Linearized** [PYD06, TT00]. **Lines** [Jia04]. **Lions** [GH03]. **Liouville** [AGG06, GM01, JW06, WJ08]. **LIP** [LWW00]. **Lipschitz** [CM08, DLST07, MT05, SV02]. **Lipschitz-Continuous** [SV02]. **Liquid** [BFP08b, DGS01, LW00b, DGS03]. **Lloyd** [DEJ06, EJ08]. **LMS** [ER02b]. **Lobatto** [Hel09]. **Local** [AH06, BHPS09, Ber09, CCPS00, CW03a, CKPS01, CKSS02, DL08a, Daw02, DS09, DJLT09, GKK03, HW09b, HK09, JPCH06, Kun01, LY01b, LY09b, LW04, PW06b, RC01, San00a, WZ04, XS08, YS02]. **Local-in-Space-timestep** [Ber09]. **Localization** [GT03, HS07b]. **Localized** [Dem06, GM09, NSV05]. **Locally** [Arb04, BN07, BLS08, CGW07, PZ04, RY05]. **Locking** [ACPC02b, CCS06, HO09]. **Locking-Free** [ACPC02b, CCS06, HO09]. **Long** [HW09b, HL00, LL06, OP00, TW06]. **Long-Time** [HL00, OP00, TW06, LL06]. **Look** [RP03]. **Lorentz** [BF08]. **Lossless** [Jia04]. **Love** [ACPC02a]. **Low** [BJM09, BRS02, BDG06, BS09, DLP05, DHHN<sup>+</sup>03, Lov05]. **Low-Frequency** [BRS02]. **Low-Order** [DHHN<sup>+</sup>03, BDG06, Lov05]. **Lower** [Car05, HS08]. **Lowest** [BR09c, Voh07]. **Lowest-Order** [BR09c, Voh07]. **Lubrication** [ZB00]. **Lubrication-Type** [ZB00]. **Lumping** [CJRT01]. **Lyapunov** [DV02, SD09]. **Lying** [Bar09a].

**MacCamy** [BIMV08, KK02a]. **Macroelement** [AS05b]. **Macroscopic** [CP05]. **Magnetization** [BW07]. **Magnetodynamics** [BPS09]. **Magnetostatic** [BRS08, DLST07]. **Magnetostatics** [HL02]. **Magnus** [HL03a]. **Majda** [KB02]. **Malik** [Ese06]. **Malliavin** [KHY09]. **Manifold** [XY07]. **Manifold-Valued** [XY07]. **Manifolds** [IK08]. **Manteuffel** [FLT08]. **Mapped** [SW04b]. **Mapping** [MR07]. **Maps** [Bar05b, BFP08a, Bar09b, HT08, HTW09, Pie05]. **Marching** [AM09b, CFFM08, For09]. **Markov** [GM05b, SS00b]. **Mass** [BW07, BCC08, CJRT01, GLY00, GGGS08, Gui03, HW09a]. **Mass-Free** [HW09a]. **Mass-Transport** [BCC08]. **Massic** [Gib04]. **Matched** [BDL04, BDL06, CW03b, CL05b]. **Matching** [CDZ00, SBM01]. **Material** [Lin07]. **Mathematical** [CZZ06, MG01, PJ01, QVZ01]. **Matrices** [Beb07, Chu00, GM06b, Lu99, Slo04, SS03b, BD07]. **Matrix** [BSC07, BR09a, Böt06, BWWW08, DWZ09, EE06, GM06a, HHT08, Huh01, IZ05, KM06, LS06b, Sim05]. **Matrix-Free** [BWWW08, GM06a]. **Matrix-Vector** [Sim05]. **Max** [FS01]. **Maximal** [CG00, Gei06, LBH03, WF08]. **Maximum** [AD99, Bea09, CMS00, DDP00, DLM09, DL08b, KK09, KL06, Kop01, Kop08, MP02a, Rod07]. **Maximum-Norm** [MP02a]. **Maxwell** [BBP08, BBM01, BRS02, BF08, Buf05, BP06b, CDZ00, CDZ03, CE05, DJLT09, GPD04, HL02, HPS04, HMN02, HZ03, Nic01, VW04]. **Mean** [Du00, For08, HY00, Hig00, LN05]. **Mean-Square** [Hig00]. **Measure** [Bar04, DGH03, MPPS02]. **Measurements** [FGS07, Küg03]. **Measures** [Hau02, Hau08, Vic04]. **Mechanics** [GK09b, Med02, MT04]. **Media** [BH05b, CHD07, Che00, CDZ03, CE05,

DPvDC08, ELS<sup>+</sup>02, KS05, KT08, LSY03, Mic03, MX07, NV04, SS07, SW05b, WD00]. **Medium** [EL08, EJS09, HO08, MMS03, NT02, Oel02, Wan08]. **Memory** [CP03, PF02, PFF08]. **Mesh** [AH06, AK07, CCGHR03, Cao07, DK99a, DWZ09, DL02, EP08, GM06b, GGHS08, JR05, LBD<sup>+</sup>03, PS08, TT03, WSD05]. **Meshes** [AC03, BR05, BLS05b, Cao07, CDZ00, CW03a, CDG08, DDO07, DJ05b, EHL07, GS07, Kun01, LRV00, MPP03, Nic01, QZZ07, TV05, WH08, WZ07]. **Meshfree** [LV08a, LV08b, KL06]. **Meshless** [GW07, LS08, Sch07]. **Method** [AG00, Ach02, AM09a, AR08a, AW09, AB03, ACPC02a, ACPC02b, ADF09, An05, AA08, AR02, AM06, Aya00, AGAN05, ASXZ08, Aza02, BG01, BNT07, BTW03, Bad06, BL00, BJ03, BW07, Bar09a, BFV09, BBFP07, BP06a, BHM09, BL01, Bea04, Bel00b, BBM01, Bel04, BMPT09, BRS02, BRS08, BD03, BF09a, BB09, BG04a, BGR02, BL05, BGP05, BH08, BDW99, BLS08, Bre05, BLS05b, BPD08, BHS06, BM02, BFH06, BZ06, CK01, Cai03, CPR<sup>+</sup>03, CK06a, CX08, CW08a, CLG05, CS07, CMR09, CTU09, CHX03, CWX09a, CFFM08, CKNS08, CCP00, CGLGP08, CS05, CWL07, CL05a, CW03b, CS08, CYL08, CKR07, CT00, CDZ03, CKPS01, CGW07, CG08, CDG08, CGSS09, CF03, CP03, DZ09, DP00, Daw02, DD07, Den08, Deu07, DK08b, DV05, DS09, Dos04, Du00, DG00, DL03]. **Method** [DLST07, DJLT09, EHW00, EE06, EP08, ELL02, FN09b, FN09a, For09, GAT00, GLY00, GG09, Gie05, GP99, GP00, GSS06, GL00, yGpMT01, GH03, Guo06, GS07, Guo09, GZ09, HDVV09, HW03, HR09, HL02, He03, HLP08, Her03, HR00, Hig00, HKW09, HL03b, HL09b, HZ03, JJ06, JPCH06, JK09, JY09, Kac01, Kal00, KR05, KLPV01, KK02a, KLS03, KDW08, KS08a, KS01b, KS05, Kwe00, LS09, LN04, LS07a, Lee04, LS06a, LM07, LF99, LX09, LS02, Liu00, LLK<sup>+</sup>04, LMTY04, LFPS06, Lu99, LO09, MS00a, MS01a, MST00, MP02a, Mar05, MTW02, Mau09, MT04, Med07, MS09, MV00, MX07, NS09, NTW08a, NTW08b, NP05, Oel02, OR04, ORG09, Ovt03a, Ovt03b, PF02, PYD06, PJ01, PJ02, PS04, Pie05, sQLXsJjB05, QX06, RP02, RW05, Rin01, Rin03, Ris01, SSTT05]. **Method** [San09, San00a, San03, San00b, Sch00, Sch05, SS00a, Seg02, She03, SLS09, SWL09, Sou05, Sta05, Sta07, Ste05, Sto09, SL99, TW07, Tha00, TK01, VV08, VW04, Wal05, WZ04, WZ05, Wan07, WS07, WSD05, WY05, WY06, WB00, WTW00, Woh00, WK01, WZ08, WML03, Xu00a, XLC02, XS08, YS02, Yan06, Ye04, Ye06, YD08, YA05, ZS06, ZLAT08, Zor00, dFN00, dFN02, dFGAN08, vdVIB07, Dar00, KL06]. **Methods** [AG09, AJG04, AC00a, AM09b, Ani09, ADZ09, AS02, ABV06, ACWY00, ABCM02, AKW05, ALNO07, AD02, AM09c, Bad05, BHN09, BK00, Bea09, Bel00a, BSES05, BM06, BHL03, BLS<sup>+</sup>05a, BBD02, Beu02, BEL08, BHR07, BCM04, BG05, Böh08, Bos07, ByS06, BWWW08, BPV01, BK06, Bur05, BF09b, BS09, BB00, BT02, BL09, BS03, CS04, CLW04, CCGHR03, CLT05, CCS06, CW08b, CDZ00, Che00, CNQ00, CD01, CEJS02, CMX02, CC04, CGH05, CM08, CWX09b, CK00, CKK01, CKK02, CY07, CW06b, CE05, CE06, CE09, CKSS02, CG04, CG09, CGL09, CHR04, CS01, DDU02, DKS02, DK99a, Daw06, DM06, DK08a, DF09, DMO07, Dem02, Dem09, DQV07, DJ05b, yDLST06, DL02, EW00, ER02b, EK09, EG06a, EG06b, EG08, ELM00, ELS<sup>+</sup>02, FLL<sup>+</sup>06, Fen00, FK01, FW09a, FN09a, FS04]. **Methods** [FS09, FS01, FSL05, Gan06, GH07, GHS03, GMM07, GLL08, GPHA07, GKS00, GK09a, GK09b, GLQZ02, GP07, GS03b, Hac07, HW09b, HL00, Hel09, HX00, HMS02, Hig05, Hig06, HS02, HO05, HOS09, HM07, HK07, HSS00, HMS03, HS07b, Huh01, HRS03,

Jay00, Jay07, JD04, JR05, KOT05, KF03, KLR06, KM03, KL05, KWD02, KHP02, KV02, KK00, LV08a, LMPQ04, LW00a, LFB02, LLRZ00, LS08, LBD<sup>+</sup>03, LSTZ07, LY09a, LS06b, Lu99, MST05, MS01b, MS02, Maj05, MMR06, MMR06, Mar01, MTW03, MM03, MP01, Mat04, MST06, Med02, MN05, MV03, MRT02a, NS03, Nic05, Nic06, Not07, PFF08, Pao01, Pao07, PS03, Par01b, Par01c, PW99a, PW99b, PSWS08, DEG08, PZ04, Pon07, Pro08b, QZZ07, Ran08, Ric02, Rin00, RSZ01, RWG01, Röß09, RWY07, RS04].

**Methods**  
[RLK09, SFNW05, SV02, SV05, SS07, SS08, Sch07, SW04a, SS09, SM08, SV03, She00, SW04b, SS03a, Sim05, SD09, SR02, ST06, SW05b, SD02, TT03, THBS09, Tha08, TF04, VO02, WY01, WY07, WW07, WH08, Wen05, Wen09, WB00, Wol00, WD00, XH05, XT06, Yan05, ZS04, Zha08, Zho01, ZLAT09, dV04, dFGAN09, BW06, Par06]. **Metrics** [Cao07]. **MFEM** [Wan08].

**Micromagnetics** [CP05]. **Mimetic** [BLS<sup>+</sup>05a, BLS05b, CMR09]. **Mindlin** [ACPC02b, Cai00, Car02, Lov05, SS09, dV04].

**Mini** [PS08]. **Minimal** [CH02, GS00, HS09, LWX00, LPWE05].

**Minimax** [WZ04, YZ07].

**Minimax-Newton** [WZ04]. **Minimization** [Bad06, DK00, FS09]. **Minimizers** [Nik02].

**Minimizing** [HW09b]. **Minmod** [KPT05].

**Minmod-Type** [KPT05]. **Minvar** [GKK03]. **Miscible** [BJM09, CHD07, Cha07]. **Miss** [AGG06].

**Miss-Distance** [AGG06]. **Mittag** [SH08].

**Mixed** [AD99, AC00a, ACPC02a, ACPC02b, ACWY00, AW05, AB06, AGAN05, BJT00, Bel00b, BSES05, BDG06, BG04b, CPR<sup>+</sup>03, CMX09, CHD07, CK00, CKK01, CG04, CGL09, DP00, DK99a, Dem02, DV05, DL03, ELW02, ELS<sup>+</sup>02, FLL<sup>+</sup>06, FN09a, GH00, GMM07, GSWY08, HPS04, HS08, JRW02, KS05, KK00, LW00a, LBD<sup>+</sup>03, LCNY08, MX07, NS01, PF02, PW06a, PW99b, RPK04, Raf05, RSS07, Rin03, RWY07, SST03, SEL09, Sta07, Ste00, Voh07, WY05, WY06, WD00, YD08, dFGAN08].

**Mixed-FEM** [GH00]. **Mobility** [BBG99].

**Model** [ACPC02a, ACPC02b, Aya00, AD02, BNS04, BFP08b, BRLM03, BB07, BCC08, BHD06, BIR09, BHN02, BIMV08, CMX09, CP05, Che00, CD01, CW08d, DJ05a, Du00, EKS04, EK09, EB08, Fen06, GM05a, KB02, LBH03, Luc08, MX07, NJN07, OR04, PU99, Pin04, sQIXsJb05, SSZ07, WZ08, dV04].

**Modeling** [BPS09, CHD07, DGS01, EGGM05, QVZ01, WD00, DGS03].

**Modelling** [SSTT05]. **Models** [CV05, GT03, HPS05, KS08b, RP02, XT06].

**Modes** [Sou05]. **Modified** [AB08, DF09, FN09b, FDFD09, HKY00, SW09, dV04].

**Modular** [RP02]. **Mollified** [SS08].

**Moment**  
[ACPC02a, DS99, FN09a, HMY07, RSZ01].

**Monge** [FN09a]. **Monotone** [BJ05, EK00, HK07, JW00a, KT08, LBH03, Waa08].

**Monotonic** [Da08, Her03, MST07].

**Monotonicity** [HRS03, Spi07].

**Monotonicity-Preserving** [HRS03].

**Monte**  
[ALNO07, BMPT09, Dic07, Dic08, YH06].

**Moore** [Du08]. **Moreau** [HH09]. **Morgan** [DFK00]. **Morley** [XLC02]. **Mortar** [Ach02, Bel00b, BBM01, BDW99, DDP06, GSWY08, GP00, KLPV01, KL05, KW06, Kim08a, KDW08, Kim08b, KT09, Mar01, Mar05, RBX08, WY05, Woh00, WK01, Woh05, XLC02, XH05]. **Mortar-Type** [XLC02]. **Motion** [DL09a, For08, Men06, PYD06, SSTT05, UY00]. **Motions** [Leo01, PR01]. **Moving** [Arm01, DL02, LBD<sup>+</sup>03, Pie05].

**MR1860443** [DGS03]. **Multiblock** [ACWY00]. **Multibody** [HW05].

**Multidimensional** [ADN00, BL03, KHY09, PS02b, TF04, WSE01]. **Multidisciplinary** [DG00]. **Multifield** [EG08]. **Multigrid** [AS02, Beu02, BDW99, ByS06, FV04, GP00,

GPD04, HK07, Lee04, Not07, OR04, PW06a, SS09, WK01, Woh05, XLC02]. **Multilevel** [Ait05, AH06, Bad06, Beu04, BPD08, CWX09b, CMM03, CMMR03, DE08, MMRR06, MMR06, Pfl00, Sar03]. **Multiphase** [KT08]. **Multiple** [KMS05, WZ04, WZ05, YZ07]. **Multiplicative** [BTW03, MST00, NS03]. **Multiplier** [KLPV01, SV02, Woh00]. **Multipliers** [ADF09, BRS02, CS05, HSY04, Mar05]. **Multiply** [DLST07]. **Multipoint** [WY06]. **Multipole** [BL05, Sar03, Dar00]. **Multiprecision** [BHSI08]. **Multiresolution** [CLG05, GM08]. **Multiscale** [ABV06, AB06, BHS06, CCZ02, CET09, CS08, EHW00, EGR<sup>+</sup>08, GK09b, HS07b, JPT00, Lin06]. **Multisection** [HLP08]. **Multistep** [Ber02, BD07, BW06, Han06, HRS03, MST06]. **Multivariable** [BL05]. **Multivariate** [DL05, LLF01, Peñ00, PDP06, Rab00, TWB07, dB03a]. **MultiWell** [GP99].

**Naghdi** [BB07, BHD06]. **Natural** [Dep08, Gug01, HS02, LZ08]. **Navier** [AG00, AGAN05, BACF06, CMX09, DR08, Dep08, EHL07, Fen06, FGNQ02, GR09, GGGS08, GM00b, GL00, He03, HS07a, HL09b, JLM08, KR05, KLR06, Kwe00, Liu00, LW07, LCNY08, Man06, Med07, NP05, NS05, Pro08b, Reb07, SV05, TT00, TW06, Xu00b, Xu00a, dFN00, dFGAN08, dFGAN09]. **Near** [BHV08, Ker00]. **Near-Interpolation** [Ker00]. **Near-Linear** [BHV08]. **Nearly** [BL01, HC09]. **Nearness** [Huh01]. **Necessity** [Wan01]. **Nédélec** [AC03, Say09]. **Negative** [BCT00]. **Negative-Order** [BCT00]. **Nematic** [BFP08b]. **Nets** [DLP05, PDP06, YH06]. **Neumann** [KPY04, YA05]. **Neumann-Type** [YA05]. **Neutral** [WM08]. **Neutron** [MRS00]. **Newton** [An05, BHM09, BWWW08, BK06, GK09a, GLQZ02, HDVV09, Jay00, Kal00, KF03, LF99, PSWS08, Rie05, WZ04, WSD05]. **Newton-Based** [LF99]. **Newtonian** [CLW04, DPR06, EL07]. **Nicely** [dP07]. **Nicolson** [HS07a, He03, Rod07]. **Nicolson/Adams** [HS07a]. **no** [DGS03]. **Nodal** [AB08, BFV09, HX07]. **Node** [LO09]. **Node-Based** [LO09]. **Nodes** [LLF01]. **Noise** [BHM09, BMPT09, ET08, MRT02b, BW06]. **Noises** [DZ02]. **Noisy** [Lin06]. **Non** [Ait05, Des04, EL09, ELS<sup>+</sup>02, GM01, RS06]. **Non-Cartesian** [Des04]. **Non-Fickian** [ELS<sup>+</sup>02, RS06]. **Non-Hermitian** [EL09]. **Nonaffine** [CTU09]. **Nonautonomous** [HV05, OP00, Tha06]. **Nonclassical** [LR00]. **Noncoercive** [Buf05, DGH03]. **Nonconforming** [AD99, Ain05, AR08b, AM08, Bur05, Car02, CHO07, CT00, EHW00, Gre07, HhW02, HS08, KT03, Lov05, PS03, Wan01, Xu00b]. **Nonconservative** [MP02b, TZ99, Par06]. **Nonconvex** [ABFM04, Bar04, CL05a, San09, Tow01]. **Nondegeneracy** [EJR08]. **Nondifferentiable** [CNQ00]. **Nonglobally** [MT05]. **Nonhomogeneous** [CDZ03, CE05, GLL08]. **Nonlinear** [AR08a, AB00, AGW04, Aya00, AD02, Bad05, BJ03, BHM09, BM06, BBD02, Bes04a, Böh08, BH08, BK06, CTU09, CD04, CNPS07, CHS00, CHX07, CS08, IC00, CMM03, CD03, DL08a, DMO07, DM08, DE08, EHR07, EJS09, FN09b, FN09a, FK05, FL05, GT00, Gie05, GK09b, GLQZ02, yGpMT01, HK01, Han06, HR00, HMS02, HL03b, HW05, IZ09, IK08, JW00a, Jia04, Jün01, Kal00, KF03, KK09, KR00, KDN00, KD03, KMS05, LF99, MMSW06, MTW03, MV00, NT02, Nou01, OS07, Pao01, Pao07, PS04, RS06, Rou00, SS00c, WD00, Yu06, ZLAT09]. **Nonlinearity** [BJ03]. **NonLipschitz** [AADL07]. **Nonlocal** [ALY01, AK09, BHN02]. **Nonmatching** [ACWY00, Bel04, CMS00, CDZ00, RBX08,

SFNW05]. **Nonmixed** [CT00]. **Nonmonotone** [GP07, LLK<sup>+</sup>04]. **Nonnegative** [SBM01]. **Nonoscillatory** [BC05, LSTZ07]. **Nonoverlapping** [BD03, Den03, DG00, Du01, GH03, HZ03, QX06]. **Nonquadratic** [Bad06]. **Nonreflecting** [AGH00]. **Nonseladjoint** [AB03]. **Nonsimply** [RD03]. **Nonsmooth** [FK05, GK09a, Mel05, Nik02, SEL09]. **Nonstationary** [LCNY08, Pro08b, Ver05a]. **Nonstiff** [TJ00]. **Nonsymmetric** [BD07, LN04, SW05b]. **Nonuniform** [ST06]. **Norm** [Bea09, CMS00, CK06a, Car05, DDP00, DM06, DLM09, Dep08, Kop01, Kop08, LMW06, LMW08a, LWX00, LY01b, LY02a, MP02a]. **Normalization** [KGDD05]. **Norms** [AL09, FS01, Slo04, VV09]. **Note** [DFK00, JW00b, Ven09, Ver09]. **Nozzle** [KT05]. **Number** [Ain04, CW08d, FW09a, WH08]. **Numbers** [DM06, Fer03, SW05a]. **Numer** [DGS03]. **Numerical** [Abg03, AS05a, AC00b, BJ03, BW07, BHPS09, Bel00a, BNV06a, BNV06b, BRLM03, BCM04, BJJ02, BGR02, BBMZ09, BJL03, BDS01, BM02, BL09, Cai03, CMX09, CG00, CCZ02, CHK01, CP00, CP05, Che00, CHS00, CF03, Cop07, CP03, DR08, DDE03, DPvDC08, Dic07, Du00, DZ02, EW00, EF01, EL07, EHR07, ET05, EG03, EGGM05, FL03, FGNQ02, FVV08, GK08, GKS00, GM01, HL00, HW03, HJ03, HL02, Her03, HMY07, HMS09, IZ09, JPCH06, JL02, Ju00, Jün01, Kim02, KT05, Kup06a, Kup06b, KGDD05, LMR<sup>+</sup>05, LWW02, LWX00, Lin06, LW07, LPSS00, MSZ08, MG01, Man06, MMRR06, MP02a, Mau09, Med00, MRT02a, MT05, NP00, NS09, Ort09, Pao01, Pao07, PS02a, PS02b, Par06, PR00, Par01a, PJ02, PS04, QVZ01, RC01, Rou00, STWW03, San00b, SV08, SH08]. **Numerical** [SS00b, SW00, SD09, SVW01, Spi07, SD02, THBS09, Thü08, VO02, Waa08, Wan07, WM08, XZ05, ZB00, ZLAT08, ZLAT09, kDH07]. **Numerics** [HLP08]. **Nyström** [MM03, SM08]. **Nyström-Type** [MM03]. **Obstacle** [Nou01, Vee01]. **Obstacles** [CM00]. **Occurring** [Bur01]. **Ocean** [Med00, Med07]. **Odd** [She03]. **Odd-Order** [She03]. **ODE** [Lam05]. **ODEs** [DGK03, GS03a, NJN07]. **Oil** [Che00]. **Oldroyd** [PYD06]. **One** [ALNO07, Bes04b, Bes08, CN01, DL09b, GHN03, GM00a, JR05, Kop01, KS01b, Lin08, MP02b, PYD06, PS02a, PZ04, Reu03, San03, TJ00, TT03]. **One-** [TT03]. **One-Dimensional** [Bes04b, Bes08, DL09b, GM00a, JR05, Kop01, KS01b, MP02b, PS02a, PZ04, San03]. **Open** [GMS05]. **Operations** [Böt06]. **Operator** [BGMV08, BR05, Buf05, CET09, CW08c, CNQ00, DD07, ETW08, EGR<sup>+</sup>08, HPS04, JKR01, JK09, KR00, KM06, Luc08, Olv09, PR00, SGM01, Ste03, Tha08, ZaY04]. **Operator-Based** [KM06]. **Operators** [AK07, DGS08, DGS09, FLT08, FSL05, Gei06, GM09, JW00b, KP03b, KK02b, Par01b, Par01c, Tod06]. **Optics** [JW06, PJ01, PJ02, Sto09]. **Optimal** [ADGK03, BT00, BDR09, BH09, BH05a, BH07, Cao07, CKNS08, CCS06, CYL08, CE06, CE09, CDG08, DDU02, Dem02, Den03, DER07, DL09b, DHV00, Dos05, GHN03, GGHS08, GS07, HK01, HW05, IK08, JCK08, Kaw08, KN08, KDZ09, KS08a, LMTY04, MS01a, MP01, RF03, Rin09, RV06, RLK09, SD05, SR02, Ste05, ST03, Wan00, WSE01, Wan08, WML03]. **Optimal-Order** [Wan00, WSE01, Wan08]. **Optimality** [AH06, San03]. **Optimization** [Ani09, BR09b, CU05, DG00, Du01, GK09b, GL00, HS07b]. **Optimization-Based** [BR09b, DG00, GL00]. **Optimized** [Gan06, GH07]. **Optimizing** [WT06]. **Option** [ALY01, CV05, WZ08]. **Options** [HW03, JD04, sQIXsJjB05]. **Orbits** [EF01]. **Order** [Abg03, AR08b, AM08, AW05, ADBN08, ACS09, BC05, BGM07, BOS05, BNV06a,

BNV06b, BMMS05, BMM05, BCT00, BBD02, Bes08, BR09c, Böh08, BH05b, BL03, BS09, BB00, CMMR01, CS02, CS03, CW08a, CCZ02, Car05, CGLGP08, CS05, CNPS07, CW03a, CC04, CY07, CG04, CGSS09, CGL09, CMM03, CMMR03, CJRT01, DS07, DB03b, Dem09, Dic08, DV05, DL09b, DS09, DHV00, DHHN<sup>+</sup>03, FLL<sup>+</sup>06, FK01, Ger08, GS03a, Gue04, HPS05, HSS00, HS08, IK08, Jün01, KP03a, KP07, KLS03, KEN01, KPY02, KPY04, KK00, LR00, LMR02, Lee99, LMW06, LMW08a, LFPS06, MS00a, MMM04, MKB07, MMSW06, Mar05, MN05, NPSK07, OS07, PYD06, PZ04, RPK04, RP02, Rin01, Röß09, RS04, RLK09, Sch09, She03, SK03, SE05, SR02, Sta05, SD02, THBS09, Tha08, Voh07]. **Order** [Wan00, WSE01, WS07, Wan08, ZLAT09, BDG06, Dem06, EG06b, Lov05, Tha06, KMM00, PS03]. **Ordered** [SV03]. **Orders** [BH05a]. **Ordinary** [BCM04, CM08, HJ03, JVD02, SP02]. **Orientation** [Cao05]. **Oriented** [MS09]. **Original** [CDG08]. **Orthogonal** [AB00, AB03, Ait05, BD03, BF09a, CO02, DR05, DGH02, KV02, LFB02, LS05, LCN08, PFF08, RP03]. **Oscillating** [CCZ02, SV08]. **Oscillation** [MNS00]. **Oscillatory** [CCF09, CI06, HL00, HV06, SS08]. **Oseen** [BFH06, Deu07, FJMT07]. **Osher** [BKT09]. **Osher-Type** [BKT09]. **Outer** [SS03a]. **Outliers** [Nik02]. **Output** [LWX00]. **Overdetermined** [Jay07]. **Overlap** [CDS03]. **Overlapping** [Ach02, BN07, CMS00, CKK01, DKW08, DW09, KW06, LSTZ07]. **Overrelaxation** [Lu99].

**Padé** [KM05]. **PageRank** [ALNO07]. **Pairs** [SV00]. **Panel** [GGHS08, Pon07]. **Panel-Clustering** [GGHS08]. **Pantograph** [BH07, HV05]. **Parabolic** [ADZ01, AGW04, ADZ09, BZ02, BF09a, CHD07, CEJS02, CH02, CW06b, CHL09, DK99a, DLM09, DER07, DMW01, FGS07, HO05, Ju00, Jün01, KR00, LS07a, LS06a, LMTY04, LR02, LS07b, MST05, MS01b, MS02, Maj05, MN03, MP02a, MV03, Obe06, OP00, OZ08, Pao01, Pon07, SS00a, SD05, SEL09, SY00, WD00, Yan05, Yan06, vPS03]. **Parabolic-Elliptic** [FGS07]. **Parallel** [Den03, DMW01, LS06a, QX06, SW04a, SL06]. **Parameter** [Bur01, BM02, Dep08, HH09, Kal00, Kaw08, PS05]. **Parameter-Dependent** [Dep08]. **Parametric** [Ani09, CP08, JVD02]. **Parametrized** [CTU09]. **Parareal** [MST07]. **Part** [BG01, BX03a, BX03b, BBK01, BNV06a, BNV06b, BRLM03, BMMS05, BMM05, CG05a, CG05b, DMC00, DGS08, DGS09, EG06b, EG08, Guo06, Guo09, NP05, PJ01, PJ02, Sch00]. **Partial** [BTZ04, BNT07, BHN09, CMMR01, CJ09, CMM03, DZ02, EG08, Hau08, JW06, LS07b, MMRR06, MMR06, NTW08a, NTW08b, Peñ03, San00b, Yan05]. **Partially** [Hun01]. **Particle** [CKR07, Oel02, Wol00]. **Particular** [Bar09a]. **Partitioned** [BL09, CHL09, Jay07]. **Partitions** [CS07, DL05, KK01]. **Passive** [HTCP09]. **Past** [Nou01]. **Patch** [Wan01]. **Path** [BHSI08, JD04]. **Path-Dependent** [JD04]. **Patlak** [BCC08]. **Pattern** [BGR02]. **PCG** [AK07]. **PDE** [BR09b, GH03]. **PDEs** [CTU09, DLM07, EG06b, Thü08, WF08, CL05a, CGH05, Gue04, MN05, WB00]. **Peer** [SW04a]. **Penalties** [BZ06, DZ09]. **Penalty** [ByS06, BLS08, BPD08, Bur05, BFH06, Bur09, CC04, CF03, DL06, EK09, HKW09, Mau09]. **Penrose** [Du08]. **Perfect** [Hla01]. **Perfectly** [BDL04, BDL06, CW03b, CL05b]. **Performing** [Sar03]. **Perimeter** [Hac07]. **Perimeter-Regularized** [Hac07]. **Periodic** [Bue07, CW03b, Dic07, DGK03, KGDD05, Pao01, ST06]. **Periodic-Coefficient** [Bue07]. **Perona** [Ese06]. **Perron** [JK09]. **Perspective** [ET08, Jun00]. **Perturbation**



[AQR06, ABFM04, SS00b]. **Perturbations** [Sch05]. **Perturbative** [Bar09a]. **Perturbed** [Cai00, KS01a, Kop08, Lin08, Lin09, Not07, Pal04, WW07]. **Petrov** [MS00a, MS01a, CS05, LLRZ00, She03]. **Petviashvili** [PS04]. **Phase** [BNS04, CP00, Cha07, Fen06, GR07, Mic03, WWL09]. **Phenomena** [NT02]. **Photonic** [Sou05]. **Piecewise** [ACDD05, Bre03, BPV01, CZ02, ELL02, FQ00, GKK03, Han08, HSW05, Kim02, MG05, PPT05, PW09, RHA03, SW03, ThT00, WJ08, WB00, Dem06]. **Pieri** [LWW02]. **Pitkäranta** [LV04]. **Pivoting** [Peñ03]. **Pivots** [Peñ03]. **Planar** [BACCF09, Cop07]. **Planck** [BDS01, Den08, Wan07]. **Plane** [ADF09, BT00, CM01, HS08, KRW08, MGP00, MS00b, MMS03, PW06a]. **Plastic** [BMPT09, Gie05, Hla01]. **Plasticity** [Sta07]. **Plate** [ACPC02a, ACPC02b, Cai00, Car02, HhW02, Mar01, RHA03, SS09, XLC02, dV04]. **Plates** [DHHN<sup>+</sup>03, Lov05, dVNS07]. **PML** [ADGK03]. **Poincaré** [Bre03]. **Point** [lC00, CN01, DDU02, DL06, DK99b, GK09a, HSY04, HTW09, MTW03, Sch05, Seg02, SLS09, SdS06, KL06]. **Points** [BHPS09, Gib04, GS03a, LZ08, Sid00, TWV00, TWB07, Vic04, WZ04, WZ05, YZ07]. **Pointwise** [AG03, CC04, Che06, Dem09, LRV00, Sch00, SW03, Dem06]. **Poisson** [AB08, Bes04b, Bes08, BG04a, BG05, CK01, CHX07, DLV08, EF01, Fil01, Hau02, Hau08, Rin03, STWW03, SBBHP04, VVD06, Wol00]. **Pol** [SM08]. **Polar** [IZ05]. **Polyconvex** [Bar05a]. **Polygon** [Can05]. **Polygonal** [CL05a, Say09]. **Polygons** [CWL07]. **Polyhedra** [HS02]. **Polyhedral** [BLS05b, KK01, Per02]. **Polymer** [Bur01]. **Polymers** [RS06]. **Polynomial** [AGY05, BHPS09, Boy02, BPV01, CL00, DGS08, DGS09, GM09, GZ09, KZ04, NZ04, PPT05, RHA03, SVW01, SVW02, SVW04, Xu03, YD08]. **Polynomials** [Bal03, BX02, DR05, ELL02, GS00, PY04, PD05, dP07, BX07]. **Polytopes** [GS05]. **Population** [Aya00, AD02]. **Pore** [DPvDC08]. **Pore-Scale** [DPvDC08]. **Porous** [CHD07, Che00, DPvDC08, EL08, EJS09, ELS<sup>+</sup>02, HO08, KS05, KT08, LSY03, Mic03, MX07, NV04, Oel02, SW05b, Wan08, WD00]. **Poroviscoelastic** [SS07]. **Posed** [BK06, CL00, FSL05, Kal00, LLF01, Mat04, NS05, PS05, Rin01]. **Posedness** [AMR02, BK03]. **Position** [RSZ01]. **Positive** [CDS03, DK99b, PF02, PFF08]. **Positive-Type** [PF02, PFF08]. **Positivity** [Jün01, ZB00]. **Positivity-Preserving** [Jün01, ZB00]. **Possessing** [BGMV08]. **Possible** [PP00]. **Posteriori** [Ain05, Ain07, BX03a, BX03b, Ber09, Bur09, CTU09, CET09, Car02, CLT05, CHO07, DR08, DLM09, EP08, ETW08, EGR<sup>+</sup>08, FV03, GM00a, KP03a, Kop01, Kop08, LN05, Lar00, LY01a, LY02b, LY02a, LLK<sup>+</sup>04, LMTY04, LY09b, LW04, MN03, NZ04, Nic05, Nic06, NSV05, OPR09, Ort09, RSS04, RSS07, Vee01, Ver05b, Ver05a, Ver09, Voh07, WY05, Dem06, Mel05]. **Postprocessed** [AGAN05, dFGAN08]. **Postprocessing** [GAT00, HL09b, LS07b, MTW03, RV06, Yan06, dFN02, dFGAN09]. **Potential** [DD04, PD05, ZaY04]. **Potentials** [BRS08, RD03, WJ08]. **Power** [UY00]. **Practical** [MT09]. **Prandtl** [CW08d]. **Precipitation** [DPvDC08]. **Preconditioned** [AB03, An05, BHN09, BD07]. **Preconditioner** [BPD08, CN02, DL06, DDP06, KL05, PW06a, Reu03]. **Preconditioners** [Ait05, AH06, Ber02, BN07, BHV08, CDS03, CYN00, GM06b, MKB07, SdS06]. **Preconditioning** [CS99, HX07, KF03, KP03b, Ovt03a, Par01b, Par01c]. **Predicted** [LS02]. **Prediction** [HK01]. **Predictor** [BT02, Rin01]. **Predictor-Corrector**

[BT02, Rin01]. **Premixed** [KB02].  
**Prescribed** [Chu00]. **Presence**  
[BDL06, GGHS08, Raf05]. **Preservation**  
[Ran08, THBS09]. **Preserving**  
[BBFP07, CP08, DLV08, EF01, Han08,  
Hig05, HRS03, JW06, Jün01, LW06b, MG01,  
MRT02a, NZ04, RS04, SS00c, SR02, TF04,  
WJ08, Yu06, ZB00]. **Pressure**  
[BC06b, BG04a, BF09b, DL03, GMS05,  
Pro08b, SV05, STWW03, Wet00].  
**Pressure-Correction** [GMS05].  
**Pressure-Poisson** [BG04a]. **Pressureless**  
[BJL03, CKR07]. **Prewavelets** [FQ00].  
**Pricing** [CV05, WZ08]. **Primal**  
[AC00b, BEL08, CKK02, DL06, GMM07,  
KWD02, TV05]. **Primal-Based** [DL06].  
**Primitive** [Med07, STWW03]. **Principle**  
[For09, KK09, KL06]. **Principles** [BG05].  
**Priori** [CCPS00, Des04, EGR<sup>+</sup>08, HW05,  
JR02, Lar00, MPP03, RWG01, RV06].  
**Problem** [ALY01, AGW04, AM08, ABV06,  
ACS09, ASXZ08, BT00, BMN02, Bel00b,  
Bel04, BMPT09, BDRS00, BRS08, BC06b,  
Beu02, Beu04, BBMZ09, Böt06, BK03,  
Bur01, BS03, CS02, Che06, Cod09, CHL09,  
CF03, Cop07, DL08a, DP00, DH07, Dos04,  
DK99b, DGHL04, DLST07, DJLT09, EL07,  
ETW08, Fen00, FGS07, GMM07, GP99,  
Gui03, GM00b, HhW02, HR07, Hla01,  
Huh01, KLS03, KS08a, Kop01, KS01b,  
Kop03, Kop08, KS05, KPY04, Kun01, LM07,  
LWX00, LLK<sup>+</sup>04, MGP00, MS00b, MG05,  
Nou01, OR04, Rod07, RLK09, San03,  
Sch02b, ST03, TT00, VVD06, WY01,  
Wen09, Xu00b, XLC02]. **Problems**  
[AGG06, AG03, AB00, AB03, Ait05, ADF09,  
Ani09, AA08, Arb04, AW05, ABCM02,  
AK09, AKW05, AM09c, Aza02, BC09, BS07,  
BY00a, Bar04, BJM09, BHM09, BK02,  
Bea04, BJT00, Bel00a, BSES05, Ber04,  
BZ02, BNV06a, BNV06b, BMMS05,  
BMM05, Ber02, BCT00, BN07, BD03,  
BHMR07, BG04b, BH08, BLS08, BLS05b,  
BHS06, BK06, BZ06, BS09, CLW04, CW08a,  
CZ09, CMR09, CCGHR03, CCF09, CCPS00,  
CS05, CNPS07, CEJS02, CW03a, CC04,  
CL05b, CS08, CYL08, IC00, CK00, CY07,  
CKPS01, CG04, CGSS09, CGL09, CD03,  
CHR04, CI06, Cou09, DDU02, DKS02,  
DZ08, DDP00, DDO07, Dem09, DLM09,  
DDP06, DS09, DMW01, EP08, ELM00,  
EG03, FLL<sup>+</sup>06, FK01, FVV08, FSL05,  
GH07, GG09, GLL08, GK09a, GM01, Gre07,  
GP07, Hac07, HW09a, HB00, HS00, Her03].  
**Problems**  
[HR00, HH09, Hip02, HM06, HO05, HN09,  
HRW01, HSS00, HSY04, HW05, HMS09,  
JV03, Kac01, Kal00, KP03a, KP07, KF03,  
KS01a, Kim08a, Kim08b, KWD02, KDZ09,  
KT03, KW01, KK00, Lar00, LN04, LS07a,  
Lee99, LMPQ04, LS06a, LMW06, LFB02,  
Lin08, LRV00, LY01a, LY02b, LMTY04,  
LY09a, LY09b, MKB07, MS01b, MS02,  
Maj05, MN03, MRS00, MP02a, Mar01,  
Mar05, MP01, Mat04, Med02, MT04,  
MPP03, MG03, Nic06, NSV05, Obe06,  
OP00, Ovt03a, Ovt03b, Pal04, Pao01, PS02a,  
PS02b, PS03, Par01b, Par01c, PS05, PZ04,  
RSS04, RSS07, Rin09, RWG01, RC01,  
San00a, SS00a, SP02, SW00, SdS06, SD05,  
Spi07, SS03b, Tha00, Tid02, Vee01, WW07,  
Yan06, Ye04, Ye06, Zho01, BW06, Dem06].  
**Procedure** [AGG06, Den03]. **Process**  
[Sid00]. **Processed** [BCM04]. **Processes**  
[GM05b, Gug01, Kaw08, KS08b, Rou00].  
**Processing** [DM08, Nik02, VO02]. **Product**  
[CN01, VV08, WK01]. **Products**  
[BCT00, Sim05]. **Profile** [HM07]. **Profiles**  
[Vas01]. **Programming** [Dos05, JCK08].  
**Projected** [yDLST06, DJLT09, KLQ<sup>+</sup>08].  
**Projection**  
[AG00, AAL09, BHN02, DM06, GS03b,  
HS07b, Kal00, LS06b, MMR06, MMR06,  
MP01, Pro08b, Sim05, SD09, WY01, XY07].  
**Projection-Regularized** [Kal00].  
**Projection/Lagrange** [AG00].  
**Projections** [CW03a, HTW02, XTH07].  
**Prolate** [CGH05]. **Prolongation** [BR05].

**Prolongation/Restriction** [BR05]. **Proof** [GKK03, WN00]. **Propagation** [AGH00, BJT00, Bes08, CE06]. **Proper** [KV02, LCN08, RP03]. **Properly** [LLF01]. **Properties** [Bea09, CW08d, CP03, Ese06, HZ07, Sch02a, Ste07, Vas01, Ven09, XY07]. **Property** [FS04]. **Proximity** [Gro08]. **Pseudo** [DKIK07, FK05]. **Pseudo-Arclength** [DKIK07]. **Pseudo-Transient** [FK05]. **Pseudospectra** [JW00b]. **Pseudospectral** [KLS03, SW04b, Slo04]. **Pseudotransient** [KLQ+08]. **Pure** [BACF06, KMM00].

**QR** [DV08]. **Quadratic** [AG03, BDRS00, Dos05, Ova07]. **Quadrature** [Ayo02, BNV06b, BP05, GM09, HT08, HC09, MM03, PP00, Peh09, TWB07, YH06, dP07]. **Quadratures** [Bal03]. **Quadrilateral** [ABF05, BR09c, CKK01, DHHN+03, MNS09, PS03, Xu00b]. **Quadrilaterals** [AP02, AC03, BLS+05a]. **Qualitative** [CP03]. **Quantization** [DE08]. **Quantum** [Ayo02, DZ08, GM05a, MST07, PU99, Pin04]. **Quartic** [DS02, Han08]. **Quasi** [BD07, CKNS08, CW03a, Dic07, Dic08, EL07, GLQZ02, GP07, GS07, HDVV09, KF03, KS01b, KK00, Lin07, LRV00, LY01b, LY02a, LLK+04, Med00, Pao07, RC01, San03, San00b, VV08, YH06]. **Quasi-Continuum** [Lin07]. **Quasi-Geostrophic** [Med00]. **Quasi-interpolation** [VV08]. **Quasi-Linear** [GP07, KS01b, KK00, LRV00, Pao07, LLK+04, San00b]. **Quasi-Monte** [Dic07, YH06]. **Quasi-Newton** [GLQZ02, HDVV09, KF03]. **Quasi-Newtonian** [EL07]. **Quasi-Norm** [LY01b, LY02a]. **Quasi-Optimal** [CKNS08]. **Quasi-Static** [RC01]. **Quasi-Toeplitz** [BD07]. **Quasi-Uniform** [GS07, CW03a]. **Quasicontinuum** [DL09b, LO09]. **Quasilinear** [MMRR06, MMR06, MGP00, Dem06]. **Quasineutral** [DLV08]. **Quasistatic** [SW00].

**Radial** [PD05]. **Radiation** [HW09b]. **Radon** [XTH07]. **Random** [BNT07, BHM09, CS08, HZ07, Hau02, Hau08, KS08b, NTW08a, NTW08b]. **Random-Start** [HZ07]. **Randomly** [SKJ02]. **Range** [Bal03]. **Rank** [KJ03]. **Rapid** [AGH00, BS08]. **Rapidly** [CCZ02, SV08]. **Rate** [BTW03, Bad06, CKNS08, JKR01, KDZ09, Rin09, Waa08]. **Rate-Independent** [Rin09]. **Rates** [AK07, BHM07, DDU02, Grü03, LW00c, MS09, Rod07]. **Ratio** [AC00a, Cao05]. **Rational** [BT00, Gib04, Han08, KDZ09, LS06b, ST07, SWL09]. **Raviart** [BR09c, DL08b, RBX08, WTW00]. **RBFs** [FW09b]. **Reaction** [AM09c, BNV06a, BNV06b, BZ06, Bur09, CDG08, GH07, Kop08, Lin08, LPWE05, Luc08, Nic06, Rou00, Voh07, WSE01]. **Reaction-Diffusion** [Kop08, Lin08, Luc08]. **Reactive** [SW05b]. **Real** [Boy02]. **Reconstruction** [AKKL05, LSTZ07, MN03, ST06, XZ05, XTH07]. **Recovery** [BXZ07, CZ09, CKK02, ET08, FR08, NZ04, Ova07, WZ07]. **Recovery-Based** [CZ09]. **Rectangular** [AM08, AW05, BCDD06, CK00, FLL+06, Gre07, HS08, RWY07, Zha09]. **Recursive** [Chu00, GK09b]. **Reduced** [CTU09, Dep08, GMR07, HPS05, IK08, RP02]. **Reduced-Order** [HPS05, IK08]. **Reduction** [CS01, KDZ09, KHP02, LS05, MT09, Pal04, RSS04]. **Refinable** [Che02]. **Refined** [BS07, LW00a, dFGAN08]. **Refinement** [AH06, AS02, Cao07, EP08, GM06b, GHS08, JR05]. **Refinements** [KK01]. **Reflections** [JW06]. **Regimes** [GT03, KU02]. **Region** [BM06, GK09b, Hig99, AG09]. **Regions** [HSW05, SN04]. **Regression** [MT09].

**Regular**

[AGG06, CS99, DKW08, Gro08, TV05].

**Regularity**

[BJM09, CH02, Gei06, LPWE05, ThT00].

**Regularization** [BHMR07, Bur01, CL00, DL08a, Egg06, Egg08, FSL05, FDFD09, HH09, HM07, IKT01, LS02, MP01, Mat04, PS05, Rie05, Rin01, SGM01, SWB<sup>+</sup>04].**Regularized** [BHM09, FV03, Hac07, Kal00].**Regularizing** [BK06]. **Rehabilitation**[BR09c]. **Reissner**

[ACPC02b, Cai00, Car02, Lov05, SS09, dV04].

**Related**

[Bal03, GM01, HHT08, Huh01, Med07].

**Relation** [Ain04]. **Relative** [Thü08].**Relaxation**[BK00, Bes04a, CNPS07, GHN03, GH07, JW00a, JW00b, JPT00, LRR00, LW00c, LWW00, LW03, NP00, Par01a]. **Reliable** [BOL00, Bar05a, Hac07, Hla01, Vee01].**Remarks** [Buf05]. **Renormalized**[LV08a, LV08b]. **Representations** [Hig05].**Residual** [CS07, Car02, FJMT07, HL09a, Ris01, San00a]. **Residual-Based** [Car02].**Residual-Free** [FJMT07, San00a].**Residual-Free-Bubble** [CS07]. **Residuals**[VV09]. **Resolution** [SSZ07]. **Resonance**[HN09, Nou01]. **Respect** [Sch05].**Restarted** [EE06]. **Restricted**[CDS03, FS01, NS03]. **Restriction** [BR05].**Restrictions** [FS04]. **Results**[AS05a, BBM01, BMZ09, BH07, DL09a, MMRR06, MMR06, YZ07]. **Retarded**[DD04]. **Revisited** [WSD05]. **Richards**[RPK04]. **Richardson** [FLL<sup>+</sup>06, Sid00].**Riemann** [Nou01]. **Rigid** [ADZ01, SSTT05].**Rigorous** [HJ03, JCK08, NS09]. **Robin**[QX06, DQV07, Lee99]. **Robin-Type**[QX06]. **Robust** [Ain05, KS01b, MTW02, Med02, MT04, Pfl00, Tod06, Ver05b, Ver05a].**Robustness** [Grü03]. **Rootfinding** [Boy02].**Roots** [DR05, ER02b]. **Rosenbrock**[HOS09]. **Rosenbrock-Type** [HOS09].**Rough** [HLP08]. **RT** [AP02]. **Rules**[Dic07, Dic08, DK99b, HC09, KJ03, LO09, MM03, SKJ02, WSD04]. **Runge**

[Bos07, BB00, BT02, BS03, CM08, CG08, DK08a, DMO07, DHV00, FS04, Gug01, HO08, Hig05, Hig06, HO05, Jay00, Jay07, Röß09, RS04, Sch02a, ZS04, ZS06].

**Saddle** [lC00, DDU02, DL06, GK09a, HSY04, HTW09, SdS06, WZ04, WZ05].**Saddle-Point** [lC00, HSY04, SdS06]. **Safe**[LMR<sup>+</sup>05]. **Saffman** [GR09]. **Sampled**[AGY05]. **Sampling** [BT07, Kaw08, ST06].**Satisfaction** [JVD02]. **Satisfying**[AD00, DS99]. **Saturated** [SS07, WD00].**Saturation** [Mat04]. **Scalable** [kDH07].**Scalar** [Bar04, BRS08, Bre05, CMMR01, GM00a, Kim02, LV08b, MP03, Mis05, MV00, QS08, TW07, ZS04]. **Scale**[Arb04, Bad05, DZ08, DPvDC08, Egg08, LZ07, RP02, HS07b]. **Scaled** [Peñ03].**Scales** [Egg06, MP01, OZ08]. **Scaling**[DDP06, MST05]. **Scattered** [LS09].**Scatterers** [CM00]. **Scattering** [AM06, BGS05, BH05b, BH04, CWL07, CW03b, CL05b, CM00, HLP08, Hip03, HN09, SW09].**Scheme** [BACF06, BACCF09, BNV06b, BDR09, Bes04b, Bes04a, Bes08, BCC08, BHN02, BKT09, CJ09, CHD07, Cha07, CW08d, CKR08, CV05, DK08a, DDE03, DLV08, DPvDC08, DPR06, DM08, DGH03, DE08, Ese06, EGM05, EHL07, Fil01, For08, GGGS08, HR06, HMN02, JW06, Jün01, Kim02, KU02, Kop03, Küt01, LV04, Leo01, LWW00, LW06b, MP02b, NT02, Nou01, PS02a, PS02b, Peñ00, Pin04, Reb07, RW00, Rod07, TW06, Tow00, Tow01, Wan00, WSE01, WJ08, WWL09, Yu06, HS07a]. **Schemes**

[ADZ01, ADN00, ADBN08, AMT04, Ayo02, BC05, BJ05, Bar05b, BLW08, BGM07, BF08, BZ03, BL03, CNPS07, CO02, CD03, Cou09, CF07, DD04, Des09, EB08, ET05, EG03, Ger08, GM08, GT03, Gre07, Gro08, GMS05, HTCP09, IZ09, IKT01, JPT00, JV03, Jun00,

KPT05, KT08, LV08a, LV08b, LR00, LMR02, LRR00, LW00c, LPWE05, MP03, Mis05, NP00, Obe06, Par01a, QS08, RW07, SGM01, STWW03, SSZ07, SY00, Ven09, Waa08, WN00, Wet00, XY07, ZB00, oWZ06]. **Schmidt** [BGR02]. **Scholes** [HW03, KN00]. **Schrödinger** [Gra08, AMR02, AMR03, ADZ09, BJ03, BBD02, Bes04a, DF09, HL03a, IZ09, MPPS02, Sze04, Tha08, ZaY04]. **Schrödinger-Type** [AMR02, AMR03]. **Schubert** [LWW02]. **Schwarz** [An05, BTW03, Bad06, BN07, CDS03, DKW08, DW09, FK01, FS01, GHN03, Gan06, GH07, KW06, MST00, NS03]. **Scott** [DFK00]. **Scrambled** [HY00]. **SDEs** [BW06]. **SDFEM** [ST03]. **Search** [Kaw08, Ovt08a, Ovt08b, AG09]. **Secant** [HDVV09]. **Second** [AW05, Böh08, BS09, CS02, CW08a, CCZ02, CS05, CW08c, CMX02, CW03a, CC04, CY07, CG04, CGSS09, CGL09, DHV00, DK99b, FLL<sup>+</sup>06, FK01, GS03a, HR00, KP03a, KP07, KLS03, KPY02, KPY04, KK00, LZ07, MKB07, MN05, NPSK07, OS07, Röß09, SV00, SD02, Dem06, EG06b, PS03]. **Second-Order** [CS02, CW08a, CW03a, CC04, CGSS09, DHV00, KP03a, KP07, KLS03, KK00, OS07, Dem06, PS03, EG06b]. **section** [KT05]. **Sectorial** [LFPS06]. **Segel** [BCC08, EK09]. **Seidel** [Reu03]. **Selection** [Hig99, PS05]. **Self** [GM01, Kim02, Lar00, MP01, Ait05]. **Self-Adjoint** [GM01, Lar00, Ait05]. **Self-Regularization** [MP01]. **Self-Similar** [Kim02]. **Semi** [ASXZ08, Bar09b, BDR09, Bes04b, Bes08, CW08d, CF07, DPR06, DK99b, Egg06, EB08, Fer03, GPHA07]. **Semi-Implicit** [Bar09b, BDR09, CW08d, EB08, DPR06]. **Semi-Infinite** [ASXZ08, DK99b, GPHA07]. **Semi-iterative** [Egg06]. **Semi-Lagrangian** [Bes04b, Bes08, CF07, Fer03]. **Semicirculant** [KP03b]. **Semiconductor** [CHK01, RSZ01]. **Semidefinite** [JCK08, DEG08]. **Semidiscrete** [CH02, DDE03, DGHL04, Gou02, Maj05, Neg08, RF03, Vas01]. **Semidiscretization** [MS01b]. **Semigeostrophic** [FN09b]. **Semilinear** [CGLGP08, CH02, HO05, Kop08, LS07a, Maj05, Yan06]. **Semimonotonic** [Dos05]. **Semismooth** [CNQ00]. **Semismoothness** [SS03b]. **Sensitivities** [SP02]. **Sequence** [Sid00]. **Sequences** [BSC07, HZ07, HY00]. **Sequential** [GM05b, LS02, Rin01]. **Series** [BB00, DK08a, Pie05, Rin00, BOS05]. **Set** [BHPS09, GK09a]. **Set-Valued** [GK09a]. **Sets** [Leo01, LLF01, NSV05, Per02, SVW01, SVW02]. **Setting** [MP02a]. **Settings** [Du08]. **Several** [Ovt08b]. **Shadowing** [HJ03, OP00]. **Shallow** [DMC00, Nou01, Sta05]. **Shape** [AQR06, CP08, LM06, TV05]. **Shape-Preserving** [CP08]. **Shape-Regular** [TV05]. **Sharp** [ELS<sup>+</sup>02, GS05, MP03]. **Shear** [BDR09, PR01]. **Shear-Dependent** [PR01]. **Shell** [BB07, BHD06]. **Shifted** [SKJ02]. **Shishkin** [LRV00]. **Shishkin-Type** [LRV00]. **Shock** [KEN01, Ran08, SK03, SE05, Vas01]. **Shock-Capturing** [Ran08]. **Shocks** [LR00, Mic02]. **Shooting** [KMS05]. **Shrinkage** [SWB<sup>+</sup>04]. **SIAM** [DGS03]. **Sided** [RSS07]. **SIDEs** [SWB<sup>+</sup>04]. **Sign** [CFFM08]. **Signals** [AGY05]. **Signorini** [ACS09, HR07]. **Similar** [Kim02]. **Simple** [BB09, GM06b, Rab00]. **Simplicial** [BR05]. **Simplified** [Jay00]. **Simulating** [MT09]. **Simulation** [BMN04, Bel00a, BIR09, CCZ02, DPvDC08, GPPP06, HMY07, Jia04, JL02, KHP02, Men06, Oel02, RP02, SS07, THBS09]. **Simulations** [DG00, Med00]. **Sinc** [AA08]. **Sinc-Based** [AA08]. **Single** [Küg03]. **Singular** [AGG06, AAL09, AKW05, BL01, BY00b,

BPV01, CK01, CX08, CHX03, Chu00, CN01, DM06, Guo06, HL02, HMS03, HC09, KDN00, KD03, KW01, PPT05, Pie05, VV08].

**Singularities**

[CK01, Dos04, LMW06, LM07, LMW08a].

**Singularly**

[KS01a, Kop08, Lin08, Lin09, WW07]. **Size** [SSZ07]. **Size-Structured** [SSZ07]. **Sliding** [DL09a]. **Slyozov** [FL03]. **Small**

[AKKL05, HS09, HL03b, Med07, BW06].

**Smooth** [ACDD05, Bar09b, BSES05, Can05, CZ02, Che02, CN01, DJ05a, Dic08, PW09, ThT00, WB00, ZS04, ZS06]. **Smother**

[RHA03]. **Smoothing**

[Bea09, CNQ00, ER02a, KLP08, Tod06].

**Smoothness** [DGH02, Gro08, XY07].

**Sobolev** [Arm01, AK09, Car05, Guo06,

PDP06, SKJ02]. **Soft** [SWB<sup>+</sup>04]. **Solid**

[Fen00, GMM07]. **Solids** [CP00]. **Solitary**

[LPSS00]. **Soluble** [BNW06]. **Solute**

[QVZ01]. **Solution** [ADF09, BS08, BOL00,

BHPS09, BR09b, BHN02, BDS01, CMX09,

CET09, CF03, DR08, DK99a, DGK03,

ETW08, FVV08, FSL05, GK08, GHV00,

GM01, Her03, Hla01, Kac01, KW01, MRS00,

Oel02, PR00, Rou00, SW00, SD09, SVW01,

SVW02, SVW04, Ste03, ZLAT08, kDH07].

**Solutions** [Ayo02, Bar09a, Bar04, Ber04,

BH05a, CG00, CW03a, CW06a, Che06,

EK00, FLL<sup>+</sup>06, FL05, GS03a, HJ03, JVD02,

Kim02, KT05, Lep00, LaY09, Pao01, PS04,

San00b, SBBHP04, ThT00, Wal05, WB00,

WM08, ZS04, ZS06]. **Solver** [Beu02].

**Solvers** [Beu04, HSY04, Lam05, Man06].

**Solving**

[AK09, Bad05, BJ03, BHV08, Cai03, CX08,

CWX09a, CWX09b, Dos04, GP99, Gue04,

MP02b, Tha00, Wan07, WML03, YD08].

**Some** [AAL09, Bel00a, Ber02, BMZ09,

Buf05, DZ02, Her03, KM05, NT02, Nic05,

Nic06, SV00, Zho01]. **Souganidis** [KB02].

**Source** [JKR01, Luc08, OD09, ZLAT09].

**Space**

[AJG04, AD02, Ber09, BGMV08, CD04,

CG05a, CG05b, DL05, DFK00, Den08, DER07, EHR07, GT03, HW09a, HX07, HN09, JR05, KF03, KK09, KHP02, LX09, OZ08, PR01, Pro08a, Rin00, SE05, TJ00, WK01].

**Space-Fractional** [EHR07]. **Spaced**

[AKKL05]. **Spaces**

[Arm01, AK09, BG01, BY00b, BT07, CU05,

CP03, Dic08, DWZ09, Guo06, HX07,

KLPV01, Mat04, PDP06, RWG01, SGM01,

SKJ02, WSD04, Woh00, YZ07, YH06].

**Spacetime** [JJ06]. **Span** [KK02a]. **Sparse**

[Gra08, JK09, KK02b, NTW08a, NTW08b].

**Sparsity** [FR08]. **Spatial**

[AMR02, Cha07, FG99, KMM00, RS04].

**Spatially** [RW07]. **Special**

[CDG08, DDP06, DZ02, Seg02]. **Specialized**

[Jay07]. **Spectra** [JW00b]. **Spectral**

[AGG06, AR08a, AW09, Ani09, ASXZ08,

BBK01, BRLM03, BC06b, BB07, BD07,

BGR02, CGH05, CYL08, DV02, DK99b,

DGS01, ET08, GT00, yGpMT01, HMS03,

Lep00, LX09, LFPS06, LL06, MST05,

MMS03, MG05, Par01b, Par01c, PW99a,

PW99b, Rin03, She00, SW04b, SW05a,

SW07, SWL09, WML03, dFN00, DGS03].

**Spectral-Difference** [Rin03].

**Spectral-Galerkin** [SW07]. **Spectrally**

[PR00]. **Spectrum**

[BSC07, Ber02, CW08c, ZaY04]. **SPH**

[MV00]. **Sphere**

[FW09b, GM06a, GM09, MKB07, Xu03].

**Spheres** [BBFP07, BFP08a, DJ05b, HX00].

**Spherical** [CZZ06, CW06a, CN01, DJ05b].

**Spherically** [HS09]. **Spheroidal** [CGH05].

**Spin** [BW07]. **Spin-1** [BW07]. **Spline**

[AB08, AB00, AB03, Ait05, BD03, BF09a,

CK06b, DFK00, HRW01, HK07, KLP08,

LS09, LFB02, MST06, PFF08, RHA03,

VV08]. **Splines** [DS02, SBM01]. **Split**

[AS05b, DF09, MP02b]. **Split-Step** [DF09].

**Splits** [SBM01]. **Splitting**

[BBD02, EGR<sup>+</sup>08, Gra08, JKR01, KR00,

Luc08, NT02, RW07, SV05, Sch09, Tha08].

**Spreading** [BGN03, BNW06]. **Spurious**

[CW08b]. **SQP** [BM02, SV02]. **SQP-Type** [BM02]. **Square** [Arm01, HY00, Hig00]. **Squares** [ACS09, AM06, BY00a, BMMS05, BMM05, BG05, Cai00, CS02, CS03, CS04, CLW04, CK06a, CW08a, CMM03, CMMR03, DKS02, DS07, DL03, yDLST06, DLST07, GHS03, HDVV09, KLS03, KS05, Lee99, LMW06, LMW08a, Lin08, MMM04, MS01b, MS02, Maj05, MRS00, MMSW06, RLK09, Sta05, Sta07, Tha00, KMM00]. **Squeezable** [DGH02]. **Stability** [AC00a, AMT04, BS07, Bar05b, BLW08, BF08, BIMV08, BF09b, Cha07, Cou09, DS99, DD04, Des09, ER02b, Ese06, FQ00, FW09b, Gie05, Gug01, GGGS08, HS07a, Hig00, HMY07, Hig05, Hig06, HV05, JY09, KU02, Lam05, LV08a, LN04, LWW00, Mic02, RS04, SGM01, SL06, SS00c, SR02, Ste07, SY00, THBS09, TW06, Ven09, XT06, YA05, oWZ06]. **Stabilization** [BDG06, BF09b]. **Stabilized** [ABV06, BC06a, BC09, Bel04, BG04a, Bur05, DV05, HM06, HSS00, HS07b, KLR06, LV04, MPP03, NS01, SS09]. **Stable** [AR02, BJ03, BCT00, BG04a, DS02, FJMT07, FDFD09, GZ09, LS08, NPSK07, Ric02, Sch02b, She00, WZ05, WWL09]. **Stage** [DK08a]. **Staggered** [BLW08, GFD00, Küt01]. **Stair** [Lu99]. **Star** [DLP05]. **Start** [HZ07]. **State** [BW07, DH07, HH09, Rin03]. **State-Constrained** [DH07]. **Static** [KOT05, RC01, SV03]. **Stationary** [AM09b, BL09, CLW04, CW08d, GP09, PS04, PU99, Ver05b]. **Statistical** [BHMR07, CW08d]. **Statistics** [JLM08]. **Steady** [Man06, Rin03]. **Steepest** [BCC08]. **Stefan** [Sch02b]. **Step** [Aya00, DF09, Ger08, SW04a, SL99, Ven09]. **Stepping** [BS06, CHL09, HTCP09, LMTY04, XT06]. **Steps** [QS08]. **Stepsize** [FS04, HMS09, Spi07]. **Sticky** [CKR07]. **Stieltjes** [dP07]. **Stiff** [NP00]. **Stiffness** [DWZ09]. **Stochastic** [Ayo02, BTZ04, BNT07, BZ03, BB00, BT02, BL09, CWX09a, DK08a, DZ02, ET05, GS09, Hau02, Hau08, Hig00, HMS02, HMY07, KPS06, Kaw08, LL00, LS07b, LMW08b, Luc08, MSZ08, MRT02a, MT05, NTW08a, NTW08b, Röß09, WM08, Yan05]. **Stokes** [Fen06, AG00, AD99, AC00a, AM08, ABV06, AGAN05, ASXZ08, BC09, BMN02, Bel00b, Bel04, BACF06, BC06b, BG04a, BDG06, BF09b, Cai00, CMX09, Che06, CKSS02, CG05a, CG05b, CG09, Cod09, DS07, DR08, Dep08, DQV07, DL03, yDLST06, EL07, EJS09, EHL07, FGNQ02, Ger08, GR09, GMS05, GGGS08, GM00b, GL00, He03, HS07a, HL09b, JLM08, KR05, KLR06, KS08a, Kwe00, LW06a, Liu00, LY02b, LW07, LCNY08, Man06, MTW02, MS00b, Med07, MPP03, MX07, NP05, NS05, PW99b, PS08, Pro08b, Reb07, RY05, Rod07, RV06, RLK09, SV05, TT00, TW06, Ven09, WY01, Wen09, Xu00b, Xu00a, Ye06, dFN00, dFGAN08, dFGAN09]. **Stokes-Type** [Med07]. **Stokes/Darcy** [CMX09]. **Stokes/Euler** [Xu00a]. **Strain** [Hla01]. **Strang** [Gra08, Des09]. **Strategies** [ER02a, Peñ03]. **Stratigraphic** [EGGM05]. **Streamfunction** [BACF06]. **Streamline** [Liu00]. **Stress** [CS03, Hla01]. **Stress-Displacement** [CS03]. **Stress-Strain** [Hla01]. **Strong** [DR08, HMS02, Hig05, Hig06, Lin09, LMW08b, RS04, SR02, SS03b, YH06]. **Strong-Stability-Preserving** [RS04, SR02]. **Structure** [Böt06, DER07, DGHL04, MRT02a]. **Structured** [SSZ07, WH08]. **Structures** [CW03b]. **Study** [CHK01, LBH03, Yu06]. **Sturm** [AGG06, GM01]. **Subcritical** [BCC08]. **Subdiffusion** [ZLAT08]. **Subdivision** [Gro08, LM06, PW06b, XY07, Yu06, Zor00]. **Subdomains** [Ach02, DKW08, KRW08]. **Subgrid** [Arb04, AB06, KR05, KLR06]. **Suboptimal** [Dem02]. **Subregions** [KW06].

**Subspace** [BM06, EE06, FS09, KDZ09, LS05, LW03, Ovt03b, SS03a]. **Subspaces** [Sch05]. **Substructuring** [BEL08, PW99a, PW99b, WTW00]. **Successive** [Lu99]. **Sufficiency** [Wan01]. **Sufficient** [ALNO07]. **Summation** [LO09]. **Sup** [BMN02, FJMT07]. **Supercell** [Sou05]. **Superconducting** [Du00]. **Superconductivity** [CD01, EKS04]. **Superconvergence** [AAL09, BX03a, BLS<sup>+</sup>05a, BH05a, BH07, CW03a, CKPS01, ELW02, ELS<sup>+</sup>02, HTW02, LW00a, LZ08, LLK<sup>+</sup>04, RWY07, Sch05, WY01]. **Superconvergent** [BXZ07, WZ07]. **Superlinear** [AK07, BK01]. **Superlinearly** [LF99]. **Superreplication** [BBMZ09]. **SUPG** [EM03, San03]. **Support** [BHV08, NT02]. **Supported** [kDH07]. **Sure** [HMY07]. **Surface** [BMN04, Daw06, DDE05, FGS07, GR07, HW09a, STWW03, Sch02b, TT00]. **Surfaces** [Bar09b, CP08, DDE03, DD07, Dem09, Gib04, HLP08, ORG09, Zor00]. **Surfactant** [BGN03, BNW06]. **Sweeping** [KOT05, QZZ07, TCOZ03]. **Symmetric** [BFV09, BF09b, CDS03, DDE03, DL02, GLQZ02, Hip02, HS09, LF99, LBD<sup>+</sup>03, Ovt03a, Ovt03b, Sch05, SVW02, SS03b, SW05b, Vic04]. **Symmetries** [WZ04, WZ05]. **Symmetrizable** [ZS06]. **Symmetry** [Ran08]. **Symplectic** [MRT02a, MRT02b]. **Synthetic** [BB09, Van05]. **System** [ACS09, BB01, BHPS09, BACF06, BMMS05, BMM05, Bes04b, Bes08, CMMR01, CS02, CS03, CD04, CHD07, CHS00, CKSS02, CG05a, CG05b, CMM03, CMMR03, DS07, DMC00, DLV08, DGS01, Fil01, HMN02, Jün01, KMM00, Lee99, LMW06, LMW08a, Lin09, MMM04, MMSW06, Med07, Rin03, RLK09, SSTT05, Sta05, Vas01, Wol00, YD08, oWZ06, DGS03]. **Systems** [ADN00, ADBN08, AMT04, Bad05, BOL00, BP05, BHV08, Bos07, CDS03, CET09, CYN00, CS99, CW06a, DL09a, DER07, DV05, DGK03, DL06, EL09, EF01, EG06a, EG06b, EG08, GW07, GM01, HDVV09, HK01, HTCP09, HPS05, IK08, Jay07, JJ06, JW00a, KK09, KDN00, KD03, LMR<sup>+</sup>05, LMW08a, LMW08b, MST07, Mic02, MRT02a, MRT02b, MP02b, NP00, OS07, PW99a, PW99b, RP02, SN04, SVW01, SVW02, SVW04, SY00, THBS09, YD08, ZS06, Par06].

**Talbot** [WT06]. **Taming** [WH08]. **Tau** [CW08b, CW08c]. **Taylor** [NJJ07]. **Tchebycheff** [BP05]. **TD** [BF08]. **Technique** [CCF09, CL05b, Gue04]. **Techniques** [Gui03, ZLAT08]. **Temperature** [BDS01, Küg03, RW00]. **Tension** [GR07, Sch02b, TT00]. **Tensor** [Bad05, DM08, JK09]. **Tensor-Krylov** [Bad05]. **Tensorial** [Gib04, SWL09]. **Term** [LBH03, PF02, PFF08, ZLAT09]. **Terminations** [Jia04]. **Terms** [BRS08, DR05, JKR01, Luc08, Nik02, OD09, Par01a]. **Tessellations** [DEJ06]. **Test** [BHPS09, Wan01]. **Testing** [Böt06]. **Tests** [FL05]. **Tetrahedral** [KK01, Kun01]. **Tetrahedron** [AS05b]. **Thalmaier** [KHY09]. **Their** [BG05, DK08a, Du01, Lu99, PY04, BW06, MST06]. **Theorem** [FLT08, FL05, Kup06a]. **Theorems** [BG01]. **Theoretical** [DL09a, LMPQ04, MMR06, Par06]. **Theoretically** [kDH07]. **Theories** [EG08]. **Theory** [AQR06, AP02, Cai03, CHK01, CZZ06, DV02, FS01, Guo06, Guo09, Moo05, NS03, Pal04, PD05, SV03, SS00b, EG06a]. **Thermally** [BPS09]. **Thermoelasticity** [Cop07]. **Thermoviscoelastic** [CF03]. **Theta** [Hig00]. **Thin** [ACPC02b, BGN03, BNW06, BHN02, RSS04, RHA03]. **Third** [MS00a, She03]. **Third-Order** [MS00a]. **Thomas** [BR09c, DL08b, WTW00]. **Three** [AH06, Bea04, Bel04, BGM07, CPR<sup>+</sup>03, CG05b, Cod09, DZ08, DDP00, DK99b,



GGGS08, Guo06, Guo09, GZ09, HLP08, HZ03, KLPV01, Kim08b, KT09, KWD02, LM07, LMW08a, LZ08, Pon07, RD03, SGM01, Van05, WTW00].

**Three-Dimensional**

[BGM07, DDP00, GGGS08, HLP08, KWD02, LM07, LZ08, Pon07, RD03, Van05].

**Three-Field** [Cod09]. **Three-Level** [KT09, SGM01]. **Three-Point** [DK99b].

**Three-Scale** [DZ08]. **Thresholding**

[GH05]. **Tikhonov** [FDFD09]. **Time**

[AC00b, AGH00, Aya00, BHN09, BDL06, BBD02, BHV08, BS06, BS03, CD04, CL05b, CHL09, CM00, Da08, Den08, DS09, EM03, EHR07, EB08, Ger08, GFD00, GPD04, Gra08, GMS05, Gui03, HW09b, HL00, HTCP09, Han06, He03, HS07a, HL03a, HMN02, Jia04, JLM08, KR05, LFB02, LWX00, LMTY04, MST05, MS01b, OP00, OZ08, Pao01, QS08, RW00, RW07, Sch09, SS00a, Sch02b, SK03, SR02, Tha08, TW06, VW04, WW07, XT06, DER07, HW09a, JR05, LX09, LL06, PR01, Pro08a, Rin00, BNV06a].

**Time-Averaged** [JLM08].

**Time-Continuous** [Gui03].

**Time-Dependent** [BHN09, DS09, EM03, Ger08, Gra08, GMS05, He03, HS07a, HL03a, KR05, MST05, Tha08, WW07].

**Time-Depending** [AC00b].

**Time-Discretization** [EB08].

**Time-Domain** [AGH00, Jia04, VW04].

**Time-Harmonic**

[BDL06, CM00, HMN02, CL05b].

**Time-Periodic** [Pao01]. **Time-Space**

[CD04]. **Time-Stepping**

[BS06, HTCP09, LMTY04, XT06].

**Timestep** [Hig99, Ber09]. **Timestepping**

[Lam05]. **Timoshenko** [CCS06, HO09].

**Tocher** [SBM01]. **Toeplitz** [BD07, CYN00].

**Tomographic** [RF03]. **Tomography**

[MMM04, RS00]. **Tool** [Moo05].

**Topological** [LR02]. **Topology** [Hac07].

**Total**

[CS01, DK00, FS04, FV03, FS09, SWB<sup>+</sup>04].

**Total-Variation-Diminishing** [FS04].

**Tracking**

[BHSI08, Cha07, GLL<sup>+</sup>03, GM00b].

**Tractability** [YH06]. **Traction** [KMM00].

**Trajectories** [Ju00]. **Transfer** [ETW08].

**Transform** [BR09a, WT06, Sar03].

**Transformation** [KDW08, LS06a].

**Transformed** [NS09]. **Transforms**

[CZ02, LFPS06]. **Transient**

[BC06a, BF09b, FK05]. **Transition** [DJ05a].

**Transitions** [CP00]. **Transmission**

[HM06, Jia04, Tid02]. **Transmissions**

[JW06]. **Transport** [BB09, BCC08, BHN02,

CG08, CDG08, Gie05, Gui03, JPT00, KU02,

MRS00, Rin00, SW05b, Van05].

**Transport-Projection** [BHN02].

**Transport-Reaction** [CDG08]. **Treatment**

[DMC00, FGNQ02]. **Tree**

[JD04, sQlXsJjB05]. **Triangle**

[Cao05, Hel09, LSX08, TWV00]. **Triangular**

[AR08b, BXZ07, Beb07, CET09, CJRT01,

QZZ07, SWL09]. **Triangulation** [DFK00].

**Triangulations** [FQ00]. **Tridiagonal**

[BOL00]. **Trigonometric** [YD08].

**Trivariate** [AS05b]. **Truncated** [MM03].

**Truncation** [CI06, MTW03]. **Trust**

[AG09, BM06, GK09b, Hig99].

**Trust-Region** [BM06, GK09b, AG09].

**Turán** [Peh09]. **Turbulent**

[BRLM03, KB02]. **Turning** [GS03a]. **Two**

[Arb04, BRLM03, BH09, BHD06, BX02,

BLS08, BH05b, CMX09, Cha07, CG05a,

CHL09, DDO07, DB03b, DKW08, DK99b,

FK01, Fen06, GMM07, GM00a, GR07, He03,

KL05, KW06, Kop03, Lin07, Lin08, LZ07,

Mar05, Med00, Mic03, MX07, Neg08, Not07,

RSS07, SW04a, SE05, TT03, TW06, TK01,

TV05, Wan00, oWZ06, BX07].

**Two-Dimensional**

[BLS08, BH05b, DDO07, GMM07, Kop03,

Lin07, TT03, TW06, TV05, Wan00, oWZ06].

**Two-Grid** [CMX09, MX07, Neg08, Not07].

**Two-Layer** [Med00]. **Two-Level**

[FK01, He03, KW06]. **Two-Phase**

[Fen06, GR07, Mic03]. **Two-Point** [DK99b]. **Two-Scale** [Arb04, LZ07]. **Two-Sided** [RSS07]. **Two-Step** [SW04a]. **Type** [AJG04, AMR02, AMR03, BH07, BM02, BKT09, BT02, FG99, GP07, HO08, Hau08, HMS02, HOS09, KPT05, KK01, LRV00, LRR00, LLK<sup>+</sup>04, Man06, MM03, Med07, PF02, PFF08, PZ04, QX06, QS08, XLC02, YS02, YA05, ZB00, MKB07].

**Ulam** [JK09]. **Ultra** [BMPT09]. **Ultraspherical** [PP00, dP07]. **Unbounded** [BS08, HB00, HSW05, KDZ09, MST05, SGM01, She00]. **Uncertain** [Hla01]. **Unconditional** [SL06]. **Unconditionally** [BJ03]. **Unconstrained** [DP00, WK01]. **Underdetermined** [CW06a]. **Underwater** [ADZ09]. **Unified** [ABCM02, Bac06, BC09, Bur05, CY07, CGL09, YZ07]. **Uniform** [BK02, BDL06, Da08, DM06, Des09, DE08, GS09, GS07, KU02, LW00a, LRV00, Pin04, PW09, WW07, Zha08, CW03a]. **Uniformly** [JPT00]. **Unilateral** [Bel00a, Cop07, RC01]. **Unit** [Xu03]. **Unsteady** [BACF06, Mor01, Ven09]. **Unstructured** [BX03b, BXZ07, KMS05, Küt01, Lin06]. **Unsymmetric** [LS08, Sch07]. **Updates** [SV02]. **Upper** [VV09]. **Upscaling** [Arb04, AB06, KM06]. **Upwind** [BC05, BGP05, Bre05, Kop03, Mis05, SV03, TF04]. **Upwinding** [ER02a]. **Use** [DK08a, WF08]. **Useful** [AK09]. **Using** [AGG06, AQR06, AAL09, BC06a, BWWW08, Bur05, CK01, Cod09, CP08, DL05, DGK03, FS01, FL05, Hel09, JK09, KDW08, KHY09, Kup06b, Luc08, Ova07, RP02, Rie05, RHA03, ST07, She00, SWL09, Ste03, WN00, Woh00, YH06, GSWY08, Zha08]. **Uzawa** [Bac06, BMN02, IC00, NP05].

**Validated** [DLM07]. **Validity** [Say09]. **Valuation** [ALY01]. **Value** [AA08, AKW05, Ber04, Ber02, BK03, CS02, Cou09, DKS02, Dos04, EP08, FVV08, Her03, HMS09, JCK08, KS01a, KLS03, KW01, LLK<sup>+</sup>04, Pal04, Pao01, Rod07, SP02, Spi07]. **Valued** [FR08, GK09a, XY07]. **Values** [Chu00, DK08a]. **Vanishing** [BH05a, FN09a, yGpMT01]. **Vanka** [Man06]. **Vanka-Type** [Man06]. **Variable** [ADZ01, Aya00, BF09a, BGMV08, DB03b, KF03, KT05, LW07, Sim05, ZLAT09]. **Variable-Order** [ZLAT09]. **Variables** [BX02, SW04a, BX07]. **Variably** [WD00]. **Variance** [KHP02, MT09]. **Variant** [MR07]. **Variates** [GM05b]. **Variation** [CS01, DK00, FS04, FV03, FS09, SWB<sup>+</sup>04]. **Variational** [AK09, Aza02, BTW03, BS07, BMN04, Bar04, Bel00a, BZ02, CCGHR03, CD03, EKS04, HS00, HS07b, kDH07]. **Variations** [AG03]. **Vector** [FR08, FW09b, RD03, Sim05, WTW00]. **Vector-Valued** [FR08]. **Vectors** [Che02, Gib04]. **Velocity** [BC06b, BLS<sup>+</sup>05a, CFFM08, DL03, GS03b, GM00b]. **Velocity-Changing** [CFFM08]. **Velocity-Correction** [GS03b]. **Velocity-Pressure-Vorticity** [DL03]. **Verification** [KDN00, KD03]. **Version** [AC03, Ain04, BG01, BCDD06, Gou02, Guo06, GS07, Guo09, LS07a, SS00a]. **Vertically** [BK03]. **Very** [Ber04, Fer03]. **Via** [AK07, Xu00a, BR09a, BCT00, BHN02, CT00, CG05a, CG05b, Gib04, KF03, Kaw08, MT09, Pro08b]. **Vibration** [HO09, LFB02]. **View** [MTW03]. **Viscoelastic** [EM03, HS00, Lee04, RS06]. **Viscoelasticity** [SW00]. **Viscoplasticity** [CHS00]. **Viscosities** [BDR09, PR01]. **Viscosity** [AR08a, BIR09, CLG05, yGpMT01, KR05, Lep00, LW07]. **Viscous** [ELM00, Kwe00, Oel02]. **Vlasov** [Bes04b, Bes08, Fil01, Sch09, Wol00]. **Void** [BNS04]. **Voltage** [PU99]. **Volterra** [BPV01, BH05a, BS06, CHX03, CL00, Da08, LLRZ00, Rin01, SV00]. **Volume** [AGW04, BGP05, BH08, CLT05, CHD07, CL05a, CKK01, CY07, CDZ03, CE05,

DDO07, Des04, DM08, DGH03, DJ05b, EP08, ELL02, EHL07, Fil01, GHV00, JJ06, LR02, Mau09, Mer08, Mic03, Nic05, Nic06, OPR09, PZ04, RWY07, SFNW05, SBM01, Wen05, WN00, Ye04, Ye06]. **Volume-Type** [PZ04]. **Voronoi** [DJ05b, DEJ06]. **Vortices** [Du00]. **Vorticity** [BC06b, DL03, vdVIB07]. **Vries** [MS01a].

**Wagner** [FL03]. **Walls** [QVZ01]. **Walsh** [Dic08]. **Water** [DMC00, Daw06, Sta05]. **Water/Surface** [Daw06]. **Wave** [Ain04, AGH00, BS08, BFP08a, Bar09b, BJT00, BGS05, CW03b, CGH05, CE06, CE09, CJRT01, FW09a, FG99, GHN03, GFD00, Gie05, GSS06, JRW02, JR05, KM06, KPY02, KPY04, Neg08, NPSK07, PS04, Per09, SW05a, oWZ06]. **Wave-Type** [FG99]. **Waveform** [BK00, GHN03, GH07, JW00a, JW00b, LW03]. **Wavelet** [CZ02, CD03, CHR04, DDU02, DKS02, KS08b, LPWE05, SWB<sup>+</sup>04, Ste03, Ste07, vPS03]. **Wavelets** [DS99, DL05]. **Waves** [ADF09, CM00, LPSS00, MMS03, PJ01, PJ02, SS07, Sto09]. **Weak** [AD00, AMR02, Ayo02, BMPT09, Ber04, BHN02, EJR08, LL00, MSTZ08, Pie05, SBBHP04, Waa08]. **Weakly** [AAL09, BPV01, CHX03, PPT05, VV08]. **Weighted** [BG01, BZ06, CW08a, DZ09, DLP05, FS01, Guo06, HSW05, HRW01, JY09, LMW06, LMW08a, SKJ02, WSD04]. **Weighted-Norm** [LMW06, LMW08a]. **Weights** [Peh09]. **Well** [BK03, CGLGP08, GT03, NS05, Nou01]. **Well-Balanced** [CGLGP08, GT03, Nou01]. **Well-Posed** [NS05]. **WENO** [BL03, WS07]. **While** [EF01]. **Whitney** [BR05, RB09]. **Widths** [KS01a]. **Wiener** [KHP02]. **Wigner** [Gou02, MPSS02]. **Wigner-Measure** [MPSS02]. **Without** [CW08b, Lin07, BMN02, GS09]. **Worsey** [AS05b]. **Writhe** [Can05].

**Yield** [Hla01]. **Yosida** [HH09, Ven09]. **Young** [Bar04].

**Zakai** [GPPP06]. **Zeros** [Boy02, GS03a, KDN00, KD03, Seg02]. **Zipper** [MR07]. **Zolotarev** [BT00]. **Zooming** [MG01].

## References

**Annaby:2008:SBM**

[AA08] M. H. Annaby and R. M. Asharabi. On sinc-based method in computing eigenvalues of boundary-value problems. *SIAM Journal on Numerical Analysis*, 46(2):671–690, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Acosta:2007:FEA**

[AADL07] Gabriel Acosta, María G. Armentano, Ricardo G. Durán, and Ariel L. Lombardi. Finite element approximations in a nonLipschitz domain. *SIAM Journal on Numerical Analysis*, 45(1):277–295, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Amosov:2009:SSP**

[AAL09] Andrey Amosov, Mario Ahues, and Alain Lergillier. Superconvergence of some projection approximations for weakly singular integral equations using general grids. *SIAM Journal on Numerical Analysis*, 47(1):646–674, 2009. CODEN SJNAAM. ISSN 0036-

- 1429 (print), 1095-7170 (electronic).
- [AB00] **Aitbayev:2000:OSC**  
 Rakhim Aitbayev and Bernard Bialecki. Orthogonal spline collocation for nonlinear Dirichlet problems. *SIAM Journal on Numerical Analysis*, 38(5):1582–1602, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35453>.
- [AB03] **Aitbayev:2003:PCG**  
 Rakhim Aitbayev and Bernard Bialecki. A preconditioned conjugate gradient method for non-selfadjoint or indefinite orthogonal spline collocation problems. *SIAM Journal on Numerical Analysis*, 41(2):589–604, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39139>.
- [AB06] **Arbogast:2006:SUM**  
 Todd Arbogast and Kirsten J. Boyd. Subgrid upscaling and mixed multiscale finite elements. *SIAM Journal on Numerical Analysis*, 44(3):1150–1171, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AB08] **Abushama:2008:MNC**  
 Abeer Ali Abushama and Bernard Bialecki. Modified nodal cubic spline collocation for Poisson’s equation. *SIAM Journal on Numerical Analysis*, 46(1):397–418, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ABCM02] **Arnold:2002:UAD**  
 Douglas N. Arnold, Franco Brezzi, Bernardo Cockburn, and L. Donatella Marini. Unified analysis of discontinuous Galerkin methods for elliptic problems. *SIAM Journal on Numerical Analysis*, 39(5):1749–1779, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38416>.
- [ABF05] **Arnold:2005:QDF**  
 Douglas N. Arnold, Daniele Boffi, and Richard S. Falk. Quadrilateral  $\mathbf{H}$  (div) finite elements. *SIAM Journal on Numerical Analysis*, 42(6):2429–2451, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43192>.
- [ABFM04] **Aubert:2004:CDF**  
 Gilles Aubert, Laure Blanc-Féraud, and Riccardo March.  $\Gamma$ -convergence of discrete functionals with nonconvex perturbation for image classification. *SIAM Journal on Numerical Analysis*, 42(6):2429–2451, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43192>.

- ical Analysis*, 42(3):1128–1145, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41233>.
- [AC00b] **Abgrall:2003:NDB**  
Rémi Abgrall. Numerical discretization of boundary conditions for first order Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 41(6):2233–2261, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34598>.
- [ABV06] **Araya:2006:SFE**  
Rodolfo Araya, Gabriel R. Barrenechea, and Frédéric Valentin. Stabilized finite element methods based on multiscale enrichment for the Stokes problem. *SIAM Journal on Numerical Analysis*, 44(1):322–348, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AC00a] **Ainsworth:2000:SMH**  
Mark Ainsworth and Patrick Coggins. The stability of mixed  $hp$ -finite element methods for Stokes flow on high aspect ratio elements. *SIAM Journal on Numerical Analysis*, 38(5):1721–1761, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36540>.
- Alberty:2000:NAT**  
Jochen Alberty and Carsten Carstensen. Numerical analysis of time-dependent primal elastoplasticity with hardening. *SIAM Journal on Numerical Analysis*, 37(4):1271–1294, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34130>.
- [AC03] **Ainsworth:2003:CHV**  
Mark Ainsworth and Joe Coyle. Conditioning of hierarchic  $p$ -version Nédélec elements on meshes of curvilinear quadrilaterals and hexahedra. *SIAM Journal on Numerical Analysis*, 41(2):731–750, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39590>.
- [ACDD05] **Arandiga:2005:IAP**  
Francesc Arandiga, Albert Cohen, Rosa Donat, and Nira Dyn. Interpolation and approximation of piecewise smooth functions. *SIAM Journal on Numerical Analysis*, 43(1):41–57, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42624>.

- [Ach02] **Achdou:2002:MEM**  
 Yves Achdou. The mortar element method with overlapping subdomains. *SIAM Journal on Numerical Analysis*, 40(2):601–628, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37525>.
- [ACPC02a] **Amara:2002:BMM**  
 Mohamed Amara, Daniela Capatina-Papaghiuc, and Amna Chatti. Bending moment mixed method for the Kirchhoff–Love plate model. *SIAM Journal on Numerical Analysis*, 40(5):1632–1649, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37968>.
- [ACPC02b] **Amara:2002:NLF**  
 Mohamed Amara, Daniela Capatina-Papaghiuc, and Amna Chatti. New locking-free mixed method for the Reissner–Mindlin thin plate model. *SIAM Journal on Numerical Analysis*, 40(4):1561–1582, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38522>.
- [ACS09] **Attia:2009:FOS**  
 Frank S. Attia, Zhiqiang Cai, and Gerhard Starke. First-order system least squares for the Signorini contact problem in linear elasticity. *SIAM Journal on Numerical Analysis*, 47(4):3027–3043, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ACWY00] **Arbogast:2000:MFE**  
 Todd Arbogast, Lawrence C. Cowsar, Mary F. Wheeler, and Ivan Yotov. Mixed finite element methods on nonmatching multiblock grids. *SIAM Journal on Numerical Analysis*, 37(4):1295–1315, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30844>.
- [AD99] **Acosta:1999:MAC**  
 Gabriel Acosta and Ricardo G. Durán. The maximum angle condition for mixed and non-conforming elements: Application to the Stokes equations. *SIAM Journal on Numerical Analysis*, 37(1):18–36, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33129>.
- [AD00] **Acosta:2000:EEI**  
 Gabriel Acosta and Ricardo G. Durán. Error estimates for  $Cq_1$  isoparametric elements satisfying a weak angle condition. *SIAM Journal on Numerical*

- Analysis*, 38(4):1073–1088, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35910>.
- [AD02] Bruce P. Ayati and Todd F. Dupont. Galerkin methods in age and space for a population model with nonlinear diffusion. *SIAM Journal on Numerical Analysis*, 40(3):1064–1076, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37967>.
- [ADBN08] Denise Aregba-Driollet, Maya Briani, and Roberto Natalini. Asymptotic high-order schemes for  $2 \times 2$  dissipative hyperbolic systems. *SIAM Journal on Numerical Analysis*, 46(2):869–894, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ADF09] Mohamed Amara, Rabia Djelouli, and Charbel Farhat. Convergence analysis of a discontinuous Galerkin method with plane waves and Lagrange multipliers for the solution of Helmholtz problems. *SIAM Journal on Numerical Analysis*, 47(2):1038–1066, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ADGK03] Sergey Asvadurov, Vladimir Druskin, Murthy N. Guddati, and Leonid Knizhnerman. On optimal finite-difference approximation of PML. *SIAM Journal on Numerical Analysis*, 41(1):287–305, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39145>.
- [ADN00] Denise Aregba-Driollet and Roberto Natalini. Discrete kinetic schemes for multidimensional systems of conservation laws. *SIAM Journal on Numerical Analysis*, 37(6):1973–2004, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34307>.
- [ADZ01] G. D. Akrivis, V. A. Dougalis, and G. E. Zouraris. Finite difference schemes for the “parabolic” equation in a variable depth environment with a rigid bottom boundary condition. *SIAM Journal on Numerical Analysis*, 39(2):539–565, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34307>.

**Ayati:2002:GMA**

**Asvadurov:2003:OFD**

**Aregba-Driollet:2008:AHO**

**Aregba-Driollet:2000:DKS**

**Amara:2009:CAD**

**Akrivis:2001:FDS**

[//epubs.siam.org/sam-bin/dbq/article/36746](http://epubs.siam.org/sam-bin/dbq/article/36746).

**Antonopoulou:2009:GMP**

[ADZ09]

D. C. Antonopoulou, V. A. Dougalis, and G. E. Zouraris. Galerkin methods for parabolic and Schrödinger equations with dynamical boundary conditions and applications to underwater acoustics. *SIAM Journal on Numerical Analysis*, 47(4):2752–2781, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Achdou:2000:CAF**

[AG00]

Y. Achdou and J.-L. Guermond. Convergence analysis of a finite element projection/Lagrange–Galerkin method for the incompressible Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 37(3):799–826, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31358>.

**Agrawal:2003:GPA**

[AG03]

Om Prakash Agrawal and John Gregory.  $O(h^2)$  global pointwise algorithms for delay quadratic problems in the calculus of variations. *SIAM Journal on Numerical Analysis*, 41(5):1773–1784, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36746>.

[//epubs.siam.org/sam-bin/dbq/article/41062](http://epubs.siam.org/sam-bin/dbq/article/41062).

**Absil:2009:ALS**

[AG09]

P.-A. Absil and K. A. Gallivan. Accelerated line-search and trust-region methods. *SIAM Journal on Numerical Analysis*, 47(2):997–1018, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Ayuso:2005:PMF**

[AGAN05]

Blanca Ayuso, Bosco García-Archilla, and Julia Novo. The postprocessed mixed finite-element method for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 43(3):1091–1111, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60282>.

**Aceto:2006:APS**

[AGG06]

Lidia Aceto, Paolo Ghelardoni, and Giovanni Gheri. An algebraic procedure for the spectral corrections using the miss-distance functions in regular and singular Sturm–Liouville problems. *SIAM Journal on Numerical Analysis*, 44(5):2227–2243, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).



**Alpert:2000:REN**

- [AGH00] Bradley Alpert, Leslie Greengard, and Thomas Hagstrom. Rapid evaluation of nonreflecting boundary kernels for time-domain wave propagation. *SIAM Journal on Numerical Analysis*, 37(4):1138–1164, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33691>. [AH06]

**Aksoylu:2006:OMP**

Burak Aksoylu and Michael Holst. Optimality of multilevel preconditioners for local mesh refinement in three dimensions. *SIAM Journal on Numerical Analysis*, 44(3):1005–1025, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Ainsworth:2004:DDR**

- [AGW04] Boris A. Andreianov, Michaël Gutnic, and Petra Wittbold. Convergence of finite volume approximations for a nonlinear elliptic-parabolic problem: A “continuous” approach. *SIAM Journal on Numerical Analysis*, 42(1):228–251, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42346>. [Ain04]

**Andreianov:2004:CFV**

Mark Ainsworth. Discrete dispersion relation for  $hp$ -version finite element approximation at high wave number. *SIAM Journal on Numerical Analysis*, 42(2):553–575, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42346>.

**Ainsworth:2005:RPE**

- [AGY05] Rick Archibald, Anne Gelb, and Jungho Yoon. Polynomial fitting for edge detection in irregularly sampled signals and images. *SIAM Journal on Numerical Analysis*, 43(1):259–279, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43525>. [Ain05]

**Archibald:2005:PFE**

Mark Ainsworth. Robust A posteriori error estimation for nonconforming finite element approximation. *SIAM Journal on Numerical Analysis*, 42(6):2320–2341, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42511>.

**Ainsworth:2007:PEE**

Mark Ainsworth. A posteriori error estimation for discontinuous Galerkin finite element approximation. *SIAM Journal*

- on *Numerical Analysis*, 45(4): 1777–1798, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [AK09]
- Aitbayev:2005:MPN**
- [Ait05] Rakhim Aitbayev. Multilevel preconditioners for non-self-adjoint or indefinite orthogonal spline collocation problems. *SIAM Journal on Numerical Analysis*, 43(2):686–706, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60988>.
- Adimurthi:2004:GTM**
- [AJG04] Adimurthi, Jérôme Jaffré, and G. D. Veerappa Gowda. Godunov-type methods for conservation laws with a flux function discontinuous in space. *SIAM Journal on Numerical Analysis*, 42(1):179–208, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39562>.
- Axelsson:2007:MIS**
- [AK07] Owe Axelsson and János Karátson. Mesh independent superlinear PCG rates via compact-equivalent operators. *SIAM Journal on Numerical Analysis*, 45(4):1495–1516, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Aubert:2009:CNC**
- Gilles Aubert and Pierre Kornprobst. Can the nonlocal characterization of Sobolev spaces by Bourgain et al. be useful for solving variational problems? *SIAM Journal on Numerical Analysis*, 47(2):844–860, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ammari:2005:RCS**
- [AKKL05] Habib Ammari, Hyeonbae Kang, Eunjo Kim, and Mikyoung Lim. Reconstruction of closely spaced small inclusions. *SIAM Journal on Numerical Analysis*, 42(6):2408–2428, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42275>.
- Auzinger:2005:ANE**
- [AKW05] Winfried Auzinger, Othmar Koch, and Ewa Weinmüller. Analysis of a new error estimate for collocation methods applied to singular boundary value problems. *SIAM Journal on Numerical Analysis*, 42(6):2366–2386, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41892>.

- [AL09] **Arioli:2009:DIN**  
 Mario Arioli and Daniel Loghin. Discrete interpolation norms with applications. *SIAM Journal on Numerical Analysis*, 47(4):2924–2951, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ALNO07] **Avrachenkov:2007:MCM**  
 K. Avrachenkov, N. Litvak, D. Nemirowsky, and N. Osipova. Monte Carlo methods in PageRank computation: When one iteration is sufficient. *SIAM Journal on Numerical Analysis*, 45(2):890–904, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ALY01] **Allegretto:2001:FEE**  
 Walter Allegretto, Yanping Lin, and Hongtao Yang. Finite element error estimates for a nonlocal problem in American option valuation. *SIAM Journal on Numerical Analysis*, 39(3):834–857, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37013>.
- [AM06] **Austin:2006:LSF**  
 Travis M. Austin and Thomas A. Manteuffel. A least-squares finite element method for the linear Boltzmann equation with anisotropic scattering. *SIAM Journal on Numerical Analysis*, 44(2):540–560, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AM08] **Apel:2008:NAR**  
 Thomas Apel and Gunar Matthies. Nonconforming, anisotropic, rectangular finite elements of arbitrary order for the Stokes problem. *SIAM Journal on Numerical Analysis*, 46(4):1867–1891, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AM09a] **Aguilera:2009:CFF**  
 Néstor E. Aguilera and Pedro Morin. On convex functions and the finite element method. *SIAM Journal on Numerical Analysis*, 47(4):3139–3157, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AM09b] **Alton:2009:FMM**  
 Ken Alton and Ian M. Mitchell. Fast marching methods for stationary Hamilton–Jacobi equations with axis-aligned anisotropy. *SIAM Journal on Numerical Analysis*, 47(1):363–385, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AM09c] **Ayuso:2009:DGM**  
 Blanca Ayuso and L. Donatella Marini. Discontinuous Galerkin methods for

- advection-diffusion-reaction problems. *SIAM Journal on Numerical Analysis*, 47(2):1391–1420, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AMR02] Isaías Alonso-Mallo and Nuria Reguera. Weak ill-posedness of spatial discretizations of absorbing boundary conditions for Schrödinger-type equations. *SIAM Journal on Numerical Analysis*, 40(1):134–158, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37443>.
- [AMR03] Isaias Alonso-Mallo and Nuria Reguera. Discrete absorbing boundary conditions for Schrödinger-type equations. construction and error analysis. *SIAM Journal on Numerical Analysis*, 41(5):1824–1850, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41265>.
- [AMT04] Christos Arvanitis, Charalambos Makridakis, and Athanasios E. Tzavaras. Stability and convergence of a class of finite element schemes for hyperbolic systems of conservation laws. *SIAM Journal on Numerical Analysis*, 42(4):1357–1393, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42043>.
- [An05] Heng-Bin An. On convergence of the additive Schwarz preconditioned inexact Newton method. *SIAM Journal on Numerical Analysis*, 43(5):1850–1871, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61165>.
- [Ani09] Mihai Anitescu. Spectral finite-element methods for parametric constrained optimization problems. *SIAM Journal on Numerical Analysis*, 47(3):1739–1759, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AP02] Mark Ainsworth and Katia Pinchedez.  $hp$ -approximation theory for BDFM and RT finite elements on quadrilaterals. *SIAM Journal on Numerical Analysis*, 40(6):2047–2068, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39112>.

Alonso-Mallo:2002:WIP

An:2005:CAS

Alonso-Mallo:2003:DAB

Anitescu:2009:SFE

Arvanitis:2004:SCC

Ainsworth:2002:HAT

- [AQR06] **Agoshkov:2006:SDA**  
Valery Agoshkov, Alfio Quarteroni, and Gianluigi Rozza. Shape design in aorto-coronary bypass anastomoses using perturbation theory. *SIAM Journal on Numerical Analysis*, 44(1):367–384, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AR02] **Arunakirinathar:2002:SA**  
K. Arunakirinathar and B. D. Reddy. A stable affine-approximate finite element method. *SIAM Journal on Numerical Analysis*, 40(1):180–197, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38244>.
- [AR08a] **Aguirre:2008:SVM**  
Julián Aguirre and Judith Rivas. A spectral viscosity method based on Hermite functions for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 46(2):1060–1078, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AR08b] **Ainsworth:2008:FCB**  
Mark Ainsworth and Richard Rankin. Fully computable bounds for the error in non-conforming finite element approximations of arbitrary order on triangular elements. *SIAM Journal on Numerical Analysis*, 46(6):3207–3232, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Arb04] **Arbogast:2004:ATS**  
Todd Arbogast. Analysis of a two-scale, locally conservative subgrid upscaling for elliptic problems. *SIAM Journal on Numerical Analysis*, 42(2):576–598, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40663>.
- [Arm01] **Armentano:2001:EES**  
María G. Armentano. Error estimates in Sobolev spaces for moving least square approximations. *SIAM Journal on Numerical Analysis*, 39(1):38–51, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36160>.
- [AS02] **Apel:2002:MMA**  
Thomas Apel and Joachim Schöberl. Multigrid methods for anisotropic edge refinement. *SIAM Journal on Numerical Analysis*, 40(5):1993–2006, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36160>.

- [//epubs.siam.org/sam-bin/dbq/article/37541](http://epubs.siam.org/sam-bin/dbq/article/37541).
- [AS05a] Jeongho Ahn and David E. Stewart. An Euler–Bernoulli beam with dynamic contact: Discretization, convergence, and numerical results. *SIAM Journal on Numerical Analysis*, 43(4):1455–1480, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43261>.
- [AS05b] Peter Alfeld and Larry L. Schumaker. A  $C^2$  trivariate macroelement based on the Worsey–Farin split of a tetrahedron. *SIAM Journal on Numerical Analysis*, 43(4):1750–1765, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61260>.
- [ASXZ08] Mejdi Azaiez, Jie Shen, Chuanju Xu, and Qingqu Zhuang. A Laguerre–Legendre spectral method for the Stokes problem in a semi-infinite channel. *SIAM Journal on Numerical Analysis*, 47(1):271–292, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [AW05] Todd Arbogast and Mary F. Wheeler. A family of rectangular mixed elements with a continuous flux for second order elliptic problems. *SIAM Journal on Numerical Analysis*, 42(5):1914–1931, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43524>.
- [AW09] Mark Ainsworth and Hafiz Abdul Wajid. Dispersive and dissipative behavior of the spectral element method. *SIAM Journal on Numerical Analysis*, 47(5):3910–3937, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Aya00] Bruce P. Ayati. A variable time step method for an age-dependent population model with nonlinear diffusion. *SIAM Journal on Numerical Analysis*, 37(5):1571–1589, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33010>.
- [Ayo02] E. O. Ayoola. Lagrangian quadrature schemes for computing weak solutions of quan-

- tum stochastic differential equations. *SIAM Journal on Numerical Analysis*, 39(6): 1835–1864, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35731>. [BACF06]
- Azarenok:2002:VBM**
- [Aza02] Boris N. Azarenok. Variational barrier method of adaptive grid generation in hyperbolic problems of gas dynamics. *SIAM Journal on Numerical Analysis*, 40(2):651–682, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38272>.
- Bacuta:2006:UAU**
- [Bac06] Constantin Bacuta. A unified approach for Uzawa algorithms. *SIAM Journal on Numerical Analysis*, 44(6):2633–2649, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ben-Artzi:2009:CDS**
- [BACCF09] M. Ben-Artzi, I. Chorev, J.-P. Croisille, and D. Fishelov. A compact difference scheme for the biharmonic equation in planar irregular domains. *SIAM Journal on Numerical Analysis*, 47(4):3087–3108, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ben-Artzi:2006:CCS**
- Matania Ben-Artzi, Jean-Pierre Croisille, and Dalia Fishelov. Convergence of a compact scheme for the pure streamfunction formulation of the unsteady Navier–Stokes system. *SIAM Journal on Numerical Analysis*, 44(5):1997–2024, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Bader:2005:TKM**
- [Bad05] Brett W. Bader. Tensor-Krylov methods for solving large-scale systems of nonlinear equations. *SIAM Journal on Numerical Analysis*, 43(3):1321–1347, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60709>.
- Badea:2006:CRS**
- [Bad06] L. Badea. Convergence rate of a Schwarz multilevel method for the constrained minimization of nonquadratic functionals. *SIAM Journal on Numerical Analysis*, 44(2):449–477, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ball:2003:HRG**
- [Bal03] James S. Ball. Half-range generalized Hermite polynomials and the related Gaussian quadratures. *SIAM Journal on Numerical Analysis*

- sis, 40(6):2311–2317, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37093>.
- [Bar04] **Bartels:2004:AAV**  
Sören Bartels. Adaptive approximation of Young measure solutions in scalar non-convex variational problems. *SIAM Journal on Numerical Analysis*, 42(2):505–529, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40409>.
- [Bar05a] **Bartels:2005:REA**  
Sören Bartels. Reliable and efficient approximation of polyconvex envelopes. *SIAM Journal on Numerical Analysis*, 43(1):363–385, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42884>.
- [Bar05b] **Bartels:2005:SCF**  
Sören Bartels. Stability and convergence of finite-element approximation schemes for harmonic maps. *SIAM Journal on Numerical Analysis*, 43(1):220–238, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60659>.
- [Bar09a] **Barnett:2009:PAM**  
A. H. Barnett. Perturbative analysis of the method of particular solutions for improved inclusion of high-lying Dirichlet eigenvalues. *SIAM Journal on Numerical Analysis*, 47(3):1952–1970, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Bar09b] **Bartels:2009:SLA**  
Sören Bartels. Semi-implicit approximation of wave maps into smooth or convex surfaces. *SIAM Journal on Numerical Analysis*, 47(5):3486–3506, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BB00] **Burrage:2000:OCS**  
K. Burrage and P. M. Burrage. Order conditions of stochastic Runge–Kutta methods by  $B$ -series. *SIAM Journal on Numerical Analysis*, 38(5):1626–1646, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36320>.
- [BB01] **Barrett:2001:FEA**  
John W. Barrett and James F. Blowey. Finite element approximation of a degenerate Allen–Cahn/Cahn–Hilliard system.



- [BBD02] *SIAM Journal on Numerical Analysis*, 39(5):1598–1624, October 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38214>. **Besse:2002:OET**
- [BB07] Christine Bernardi and Adel Blouza. Spectral discretization of a Naghdi shell model. *SIAM Journal on Numerical Analysis*, 45(6):2653–2670, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Bernardi:2007:SDN**
- [BB09] B. L. Bihari and P. N. Brown. A linear algebraic analysis of diffusion synthetic acceleration for the Boltzmann transport equation II: The simple corner balance method. *SIAM Journal on Numerical Analysis*, 47(3):1782–1826, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Bihari:2009:LAA**
- [BBC08] David Borwein, Jonathan M. Borwein, and Richard E. Crandall. Effective Laguerre asymptotics. *SIAM Journal on Numerical Analysis*, 46(6):3285–3312, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Borwein:2008:ELA**
- [BBFP07] John W. Barrett, Sören Bartels, Xiaobing Feng, and Andreas Prohl. A convergent and constraint-preserving finite element method for the  $p$ -harmonic flow into spheres. *SIAM Journal on Numerical Analysis*, 45(3):905–927, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Barrett:2007:CCP**
- [BBG99] John W. Barrett, James F. Blowey, and Harald Garcke. Finite element approximation of the Cahn–Hilliard equation with degenerate mobility. *SIAM Journal on Numerical Analysis*, 37(1):286–318, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33166>. **Barrett:1999:FEA**

- [BBK01] **Belhachmi:2001:SED**  
 Z. Belhachmi, C. Bernardi, and A. Karageorghis. Spectral element discretization of the circular driven cavity, Part II: The bilaplacian equation. *SIAM Journal on Numerical Analysis*, 38(6):1926–1960, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35967>.
- [BBM01] **Belgacem:2001:MFE**  
 F. Ben Belgacem, A. Buffa, and Y. Maday. The mortar finite element method for 3D Maxwell equations: First results. *SIAM Journal on Numerical Analysis*, 39(3):880–901, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35796>.
- [BBMZ09] **Bokanowski:2009:NAS**  
 Olivier Bokanowski, Benjamin Bruder, Stefania Maroso, and Hasnaa Zidani. Numerical approximation for a superreplication problem under gamma constraints. *SIAM Journal on Numerical Analysis*, 47(3):2289–2320, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BBP08] **Banas:2008:CIF**  
 L’ubomír Bañas, Sören Bartels, and Andreas Prohl. A convergent implicit finite element discretization of the Maxwell–Landau–Lifshitz–Gilbert equation. *SIAM Journal on Numerical Analysis*, 46(3):1399–1422, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BC05] **Balaguer:2005:FON**  
 Ángel Balaguer and Carlos Conde. Fourth-order nonoscillatory upwind and central schemes for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 43(2):455–473, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43710>.
- [BC06a] **Badia:2006:ASF**  
 Santiago Badia and Ramon Codina. Analysis of a stabilized finite element approximation of the transient convection-diffusion equation using an ALE framework. *SIAM Journal on Numerical Analysis*, 44(5):2159–2197, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BC06b] **Bernardi:2006:SDV**  
 Christine Bernardi and Nejmedine Chorfi. Spectral discretization of the vorticity, velocity, and pressure formulation of the Stokes problem. *SIAM Journal on Numerical Analysis*, 44(2):826–850, January 2006. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Badia:2009:USF**

- [BC09] Santiago Badia and Ramon Codina. Unified stabilized finite element formulations for the Stokes and the Darcy problems. *SIAM Journal on Numerical Analysis*, 47(3):1971–2000, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Blanchet:2008:CMT**

- [BCC08] Adrien Blanchet, Vincent Calvez, and José A. Carrillo. Convergence of the mass-transport steepest descent scheme for the subcritical Patlak–Keller–Segel model. *SIAM Journal on Numerical Analysis*, 46(2):691–721, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Boffi:2006:DCH**

- [BCDD06] Daniele Boffi, Martin Costabel, Monique Dauge, and Leszek Demkowicz. Discrete compactness for the hp version of rectangular edge finite elements. *SIAM Journal on Numerical Analysis*, 44(3):979–1004, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Blanes:2004:NIO**

- [BCM04] S. Blanes, F. Casas, and A. Murua. On the numerical inte-

gration of ordinary differential equations by processed methods. *SIAM Journal on Numerical Analysis*, 42(2):531–552, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41702>.

**Bertoluzza:2000:SDC**

- [BCT00] Silvia Bertoluzza, Claudio Canuto, and Anita Tabacco. Stable discretizations of convection-diffusion problems via computable negative-order inner products. *SIAM Journal on Numerical Analysis*, 38(3):1034–1055, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36229>.

**Bialecki:2003:NDD**

- [BD03] Bernard Bialecki and Maksymilian Dryja. A nonoverlapping domain decomposition method for orthogonal spline collocation problems. *SIAM Journal on Numerical Analysis*, 41(5):1709–1728, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39979>.

**Bertaccini:2007:SAN**

- [BD07] Daniele Bertaccini and Fabio Di Benedetto. Spectral analysis of nonsymmetric quasi-

- Toeplitz matrices with applications to preconditioned multi-step formulas. *SIAM Journal on Numerical Analysis*, 45(6):2345–2367, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BDR09] **Bochev:2006:SLO**  
Pavel B. Bochev, Clark R. Dohrmann, and Max D. Gunzburger. Stabilization of low-order mixed finite elements for the Stokes equations. *SIAM Journal on Numerical Analysis*, 44(1):82–101, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BDG06] **Becache:2004:PML**  
E. Bécache, A.-S. Bonnet-Ben Dhia, and G. Legendre. Perfectly matched layers for the convected Helmholtz equation. *SIAM Journal on Numerical Analysis*, 42(1):409–433, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42098>.
- [BDL04] **Becache:2006:PML**  
E. Bécache, A. S. Bonnet-Ben Dhia, and G. Legendre. Perfectly matched layers for time-harmonic acoustics in the presence of a uniform flow. *SIAM Journal on Numerical Analysis*, 44(3):1191–1217, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BDR09] **Berselli:2009:OEE**  
Luigi C. Berselli, Lars Diening, and Michael Růžička. Optimal error estimates for a semi-implicit Euler scheme for incompressible fluids with shear dependent viscosities. *SIAM Journal on Numerical Analysis*, 47(3):2177–2202, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BDRS00] **Bermudez:2000:FEA**  
A. Bermúdez, R. G. Durán, R. Rodríguez, and J. Solomin. Finite element analysis of a quadratic eigenvalue problem arising in dissipative acoustics. *SIAM Journal on Numerical Analysis*, 38(1):267–291, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36016>.
- [BDS01] **Buet:2001:NSI**  
C. Buet., S. Dellacherie, and R. Sentis. Numerical solution of an ionic Fokker-Planck equation with electronic temperature. *SIAM Journal on Numerical Analysis*, 39(4):1219–1253, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35966>.

- Braess:1999:MAM**
- [BDW99] Dietrich Braess, Wolfgang Dahmen, and Christian Wieners. A multigrid algorithm for the mortar finite element method. *SIAM Journal on Numerical Analysis*, 37(1):48–69, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33543>.
- Beale:2004:GBB**
- [Bea04] J. Thomas Beale. A grid-based boundary integral method for elliptic problems in three dimensions. *SIAM Journal on Numerical Analysis*, 42(2):599–620, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42095>.
- Beale:2009:SPI**
- [Bea09] J. Thomas Beale. Smoothing properties of implicit finite difference methods for a diffusion equation in maximum norm. *SIAM Journal on Numerical Analysis*, 47(4):2476–2495, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Bebendorf:2007:WFE**
- [Beb07] Mario Bebendorf. Why finite element discretizations can be factored by triangular hierarchical matrices. *SIAM Journal on Numerical Analysis*, 45(4):1472–1494, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Belgacem:2000:NSS**
- [Bel00a] F. Ben Belgacem. Numerical simulation of some variational inequalities arisen from unilateral contact problems by the finite element methods. *SIAM Journal on Numerical Analysis*, 37(4):1198–1216, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34796>.
- Belgacem:2000:MMF**
- [Bel00b] F. Ben Belgacem. The mixed mortar finite element method for the incompressible Stokes problem: Convergence analysis. *SIAM Journal on Numerical Analysis*, 37(4):1085–1100, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32922>.
- Belgacem:2004:SDD**
- [Bel04] F. Ben Belgacem. A stabilized domain decomposition method with nonmatching grids for the Stokes problem in three dimensions. *SIAM Journal on Numerical Analysis*, 42(2):667–685, April 2004. CODEN SJNAAM. ISSN

- 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36882>. [Ber09]
- [BEL08] Sven Beuchler, Tino Eibner, and Ulrich Langer. Primal and dual interface concentrated iterative substructuring methods. *SIAM Journal on Numerical Analysis*, 46(6):2818–2842, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Bes04a]
- [Ber02] Daniele Bertaccini. The spectrum of circulant-like preconditioners for some general linear multistep formulas for linear boundary value problems. *SIAM Journal on Numerical Analysis*, 40(5):1798–1822, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39744>. [Bes04b]
- [Ber04] Martin Berggren. Approximations of very weak solutions to boundary-value problems. *SIAM Journal on Numerical Analysis*, 42(2):860–877, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38204>. [Bes08]
- Berrone:2009:LST**
- Stefano Berrone. A local-in-space-timestep approach to a finite element discretization of the heat equation with a posteriori estimates. *SIAM Journal on Numerical Analysis*, 47(4):3109–3138, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Besse:2004:RSN**
- Christophe Besse. A relaxation scheme for the nonlinear Schrödinger equation. *SIAM Journal on Numerical Analysis*, 42(3):934–952, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39652>.
- Besse:2004:CSL**
- Nicolas Besse. Convergence of a semi-Lagrangian scheme for the one-dimensional Vlasov–Poisson system. *SIAM Journal on Numerical Analysis*, 42(1):350–382, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41077>.
- Besse:2008:CHO**
- Nicolas Besse. Convergence of a high-order semi-Lagrangian scheme with propagation of gradients for the one-dimensional

- Vlasov–Poisson system. *SIAM Journal on Numerical Analysis*, 46(2):639–670, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BF09a]
- Beuchler:2002:MSI**
- [Beu02] Sven Beuchler. Multigrid solver for the inner problem in domain decomposition methods for  $p$ -FEM. *SIAM Journal on Numerical Analysis*, 40(3):928–944, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39385>.
- Beuchler:2004:MSF**
- [Beu04] Sven Beuchler. Multilevel solvers for a finite element discretization of a degenerate problem. *SIAM Journal on Numerical Analysis*, 42(3):1342–1356, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42841>.
- Bidegaray-Fesquet:2008:SFT**
- [BF08] Brigitte Bidégaray-Fesquet. Stability of FD–TD schemes for Maxwell–Debye and Maxwell–Lorentz equations. *SIAM Journal on Numerical Analysis*, 46(5):2551–2566, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Bialecki:2009:ADI**
- Bernard Bialecki and Ryan I. Fernandes. An alternating direction implicit backward differentiation orthogonal spline collocation method for linear variable coefficient parabolic equations. *SIAM Journal on Numerical Analysis*, 47(5):3429–3450, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Burman:2009:GFE**
- [BF09b] Erik Burman and Miguel A. Fernández. Galerkin finite element methods with symmetric pressure stabilization for the transient Stokes equations: Stability and convergence analysis. *SIAM Journal on Numerical Analysis*, 47(1):409–439, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Burman:2006:CIP**
- [BFH06] Erik Burman, Miguel A. Fernández, and Peter Hansbo. Continuous interior penalty finite element method for Oseen’s equations. *SIAM Journal on Numerical Analysis*, 44(3):1248–1274, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Bartels:2008:FEA**
- [BFP08a] Sören Bartels, Xiaobing Feng, and Andreas Prohl. Finite element approximations of wave

maps into spheres. *SIAM Journal on Numerical Analysis*, 46(1):61–87, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Becker:2008:FEA**

[BFP08b] Roland Becker, Xiaobing Feng, and Andreas Prohl. Finite element approximations of the Ericksen–Leslie model for nematic liquid crystal flow. *SIAM Journal on Numerical Analysis*, 46(4):1704–1731, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Barrenechea:2009:SNC**

[BFV09] Gabriel R. Barrenechea, Leopoldo Franca, and Frédéric Valentin. A symmetric nodal conservative finite element method for the Darcy equation. *SIAM Journal on Numerical Analysis*, 47(5):3652–3677, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Babuska:2001:DIA**

[BG01] Ivo Babuska and Benqi Guo. Direct and inverse approximation theorems for the  $p$ -version of the finite element method in the framework of weighted Besov spaces. Part I: Approximability of functions in the weighted Besov spaces. *SIAM Journal on Numerical Analysis*, 39(5):1512–1538, October 2001. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35655>.

**Bochev:2004:ASP**

[BG04a] Pavel Bochev and Max Gunzburger. An absolutely stable pressure-Poisson stabilized finite element method for the Stokes equations. *SIAM Journal on Numerical Analysis*, 42(3):1189–1207, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41654>.

**Boffi:2004:AFE**

[BG04b] Daniele Boffi and Lucia Gastaldi. Analysis of finite element approximation of evolution problems in mixed form. *SIAM Journal on Numerical Analysis*, 42(4):1502–1526, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43182>.

**Bochev:2005:LSF**

[BG05] Pavel Bochev and Max Gunzburger. On least-squares finite element methods for the Poisson equation and their connection to the Dirichlet and Kelvin principles. *SIAM Journal on Numerical Analysis*, 43(1):340–362, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-



- 7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43353>.
- [BGM07] **Berikelashvili:2007:CFO** Givi Berikelashvili, Murli M. Gupta, and Manana Mirianashvili. Convergence of fourth order compact difference schemes for three-dimensional convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 45(1):443–455, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BGMV08] **Bohonova:2008:ECD** T. Yu. Bohonova, I. P. Gavrilyuk, V. L. Makarov, and V. Vasylyk. Exponentially convergent Duhamel-like algorithms for differential equations with an operator coefficient possessing a variable domain in a Banach space. *SIAM Journal on Numerical Analysis*, 46(1):365–396, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BGN03] **Barrett:2003:FEA** John W. Barrett, Harald Garcke, and Robert Nürnberg. Finite element approximation of surfactant spreading on a thin film. *SIAM Journal on Numerical Analysis*, 41(4):1427–1464, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39799>.
- [BGP05] **Bouche:2005:EEG** Daniel Bouche, Jean-Michel Ghidaglia, and Frédéric Pascal. Error estimate and the geometric corrector for the upwind finite volume method applied to the linear advection equation. *SIAM Journal on Numerical Analysis*, 43(2):578–603, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60594>.
- [BGR02] **Bohmer:2002:NLS** K. Böhmer, C. Geiger, and J. D. Rodriguez. On a numerical Liapunov–Schmidt spectral method and its application to biological pattern formation. *SIAM Journal on Numerical Analysis*, 40(2):683–701, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33952>.
- [BGS05] **Bonner:2005:CCD** B. D. Bonner, I. G. Graham, and V. P. Smyshlyaev. The computation of conical diffraction coefficients in high-frequency acoustic wave scattering. *SIAM Journal on Numerical Analysis*, 43(3):1202–1230, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33952>.

- [//epubs.siam.org/sam-bin/dbq/article/60335](http://epubs.siam.org/sam-bin/dbq/article/60335).
- [BH04] A. Buffa and R. Hiptmair. A coercive combined field integral equation for electromagnetic scattering. *SIAM Journal on Numerical Analysis*, 42(2):621–640, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42339>.
- [BH05a] Hermann Brunner and Qiya Hu. Optimal superconvergence orders of iterated collocation solutions for Volterra integral equations with vanishing delays. *SIAM Journal on Numerical Analysis*, 43(5):1934–1949, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61570>.
- [BH05b] Oscar P. Bruno and E. McKay Hyde. Higher-order Fourier approximation in scattering by two-dimensional, inhomogeneous media. *SIAM Journal on Numerical Analysis*, 42(6):2298–2319, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42581>.
- [BH07] Hermann Brunner and Qiya Hu. Optimal superconvergence results for delay integro-differential equations of pantograph type. *SIAM Journal on Numerical Analysis*, 45(3):986–1004, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BH08] Franck Boyer and Florence Hubert. Finite volume method for 2D linear and nonlinear elliptic problems with discontinuities. *SIAM Journal on Numerical Analysis*, 46(6):3032–3070, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BH09] Alexei Bespalov and Norbert Heuer. Optimal error estimation for  $\mathbf{H}(\text{curl})$ -conforming  $p$ -interpolation in two dimensions. *SIAM Journal on Numerical Analysis*, 47(5):3977–3989, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BHD06] Adel Blouza, Frédéric Hecht, and Hervé Le Dret. Two finite element approximations of Naghdi’s shell model in Cartesian coordinates. *SIAM Journal on Numerical Analysis*, 44(2):636–654, January 2006. CO-

- DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BHN02]
- [BHL03] Marsha J. Berger, Christiane Helzel, and Randall J. LeVeque. *H*-box methods for the approximation of hyperbolic conservation laws on irregular grids. *SIAM Journal on Numerical Analysis*, 41(3):893–918, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40539>.
- [BHM09] Frank Bauer, Thorsten Hohage, and Axel Munk. Iteratively regularized Gauss–Newton method for nonlinear inverse problems with random noise. *SIAM Journal on Numerical Analysis*, 47(3):1827–1846, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BHS06]
- [BHM07] N. Bissantz, T. Hohage, A. Munk, and F. Ruymgaart. Convergence rates of general regularization methods for statistical inverse problems and applications. *SIAM Journal on Numerical Analysis*, 45(6):2610–2636, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BHN09] Zhong-Zhi Bai, Yu-Mei Huang, and Michael K. Ng. On preconditioned iterative methods for certain time-dependent partial differential equations. *SIAM Journal on Numerical Analysis*, 47(2):1019–1037, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BHS09] Daniel J. Bates, Jonathan D. Hauenstein, Chris Peterson, and Andrew J. Sommese. A numerical local dimension test for points on the solution set of a system of polynomial equations. *SIAM Journal on Numerical Analysis*, 47(5):3608–3623, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BHN02] I. Bouzoubaa, K. Hamdache, and A. Noussair. A global weak solution via transport-projection scheme to a thin film growth kinetic model with nonlocal boundary conditions. *SIAM Journal on Numerical Analysis*, 39(5):1810–1834, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36744>.
- [BHN09] A. Buffa, T. J. R. Hughes, and G. Sangalli. Analysis of a mul-

- tiscale discontinuous Galerkin method for convection-diffusion problems. *SIAM Journal on Numerical Analysis*, 44(4):1420–1440, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BIR09]
- [BHSI08] Daniel J. Bates, Jonathan D. Hauenstein, Andrew J. Sommese, and Charles W. Wampler II. Adaptive multiprecision path tracking. *SIAM Journal on Numerical Analysis*, 46(2):722–746, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BJ03]
- [BHV08] Erik G. Boman, Bruce Hendrickson, and Stephen Vavasis. Solving elliptic finite element systems in near-linear time with support preconditioners. *SIAM Journal on Numerical Analysis*, 46(6):3264–3284, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BJ05]
- [BIMV08] D. Breda, M. Iannelli, S. Maset, and R. Vermiglio. Stability analysis of the Gurtin–MacCamy model. *SIAM Journal on Numerical Analysis*, 46(2):980–995, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BJJ02]
- [Borggaard:2009:BAV] Jeff Borggaard, Traian Iliescu, and John Paul Roop. A bounded artificial viscosity large eddy simulation model. *SIAM Journal on Numerical Analysis*, 47(1):622–645, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Bao:2003:EUS] Weizhu Bao and Dieter Jaksch. An explicit unconditionally stable numerical method for solving damped nonlinear Schrödinger equations with a focusing nonlinearity. *SIAM Journal on Numerical Analysis*, 41(4):1406–1426, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41339>.
- [Barles:2005:EBM] Guy Barles and Espen R. Jakobsen. Error bounds for monotone approximation schemes for Hamilton–Jacobi–Bellman equations. *SIAM Journal on Numerical Analysis*, 43(2):540–558, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43815>.
- [Bohmer:2002:NAI] Klaus Böhmer, Dása Janovská, and Vladimír Janovský. On

- the numerical analysis of the imperfect bifurcation of codim  $\leq 3$ . *SIAM Journal on Numerical Analysis*, 40(2):416–430, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36928>.
- [BJL03] François Bouchut, Shi Jin, and Xiantao Li. Numerical approximations of pressureless and isothermal gas dynamics. *SIAM Journal on Numerical Analysis*, 41(1):135–158, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39804>.
- [BJM09] Sören Bartels, Max Jensen, and Rüdiger Müller. Discontinuous Galerkin finite element convergence for incompressible miscible displacement problems of low regularity. *SIAM Journal on Numerical Analysis*, 47(5):3720–3743, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BJT00] E. Bécache, P. Joly, and C. Tsogka. An analysis of new mixed finite elements for the approximation of wave propagation problems. *SIAM Journal on Numerical Analysis*, 37(4):1053–1084, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34549>.
- [BK00] Z. Bartoszewski and M. Kwapisz. On error estimates for waveform relaxation methods for delay-differential equations. *SIAM Journal on Numerical Analysis*, 38(2):639–659, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35591>.
- [BK01] Bernhard Beckermann and Arno B. J. Kuijlaars. Superlinear convergence of conjugate gradients. *SIAM Journal on Numerical Analysis*, 39(1):300–329, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36318>.
- [BK02] Markus Bause and Peter Knabner. Uniform error analysis for Lagrange–Galerkin approximations of convection-dominated problems. *SIAM Journal on Numerical Analysis*, 39(6):1954–1984, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-

- 7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36747>. [BL00]
- [BK03] Andrei Bourchtein and Vladimir Kadychnikov. Well posedness of the initial value problem for vertically discretized hydrostatic equations. *SIAM Journal on Numerical Analysis*, 41(1):195–207, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39831>.
- [BK06] Martin Burger and Barbara Kaltenbacher. Regularizing Newton–Kaczmarz methods for nonlinear ill-posed problems. *SIAM Journal on Numerical Analysis*, 44(1):153–182, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BL03]
- [BKT09] Raimund Bürger, Kenneth H. Karlsen, and John D. Towers. An Engquist–Osher-type scheme for conservation laws with discontinuous flux adapted to flux connections. *SIAM Journal on Numerical Analysis*, 47(3):1684–1712, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BL05]
- Bao-Lin:2000:DGB**  
Zhang Bao-Lin. Difference graphs of block ADI method. *SIAM Journal on Numerical Analysis*, 38(3):742–752, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34008>.
- Beale:2001:MCN**  
J. Thomas Beale and Ming-Chih Lai. A method for computing nearly singular integrals. *SIAM Journal on Numerical Analysis*, 38(6):1902–1925, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36284>.
- Burger:2006:RNK**  
Martin Burger and Barbara Kaltenbacher. Regularizing Newton–Kaczmarz methods for nonlinear ill-posed problems. *SIAM Journal on Numerical Analysis*, 44(1):153–182, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BL03]
- Burger:2009:EOT**  
Raimund Bürger, Kenneth H. Karlsen, and John D. Towers. An Engquist–Osher-type scheme for conservation laws with discontinuous flux adapted to flux connections. *SIAM Journal on Numerical Analysis*, 47(3):1684–1712, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [BL05]
- Bryson:2003:HOC**  
Steve Bryson and Doron Levy. High-order central WENO schemes for multidimensional Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 41(4):1339–1369, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40840>.
- Bokanowski:2005:FMM**  
Olivier Bokanowski and Mohammed Lemou. Fast multipole method for multivariable integrals. *SIAM Journal on Numerical Analysis*, 42

(5):2098–2117, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40969>.

**Burrage:2009:ASD**

[BL09] Kevin Burrage and Grant Lythe. Accurate stationary densities with partitioned numerical methods for stochastic differential equations. *SIAM Journal on Numerical Analysis*, 47(3):1601–1618, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Berndt:2005:SVM**

[BLS<sup>+</sup>05a] M. Berndt, K. Lipnikov, M. Shashkov, M. F. Wheeler, and I. Yotov. Superconvergence of the velocity in mimetic finite difference methods on quadrilaterals. *SIAM Journal on Numerical Analysis*, 43(4):1728–1749, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60683>.

**Brezzi:2005:CMF**

[BLS05b] Franco Brezzi, Konstantin Lipnikov, and Mikhail Shashkov. Convergence of the mimetic finite difference method for diffusion problems on polyhedral meshes. *SIAM Journal on Numerical Analysis*, 43(5):1872–1896, October 2005.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61395>.

**Brenner:2008:LDF**

[BLS08] Susanne C. Brenner, Fengyan Li, and Li-Yeng Sung. A locally divergence-free interior penalty method for two-dimensional curl-curl problems. *SIAM Journal on Numerical Analysis*, 46(3):1190–1211, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Bauer:2008:SSS**

[BLW08] Amy L. Bauer, Raphaël Loubère, and Burton Wendroff. On stability of staggered schemes. *SIAM Journal on Numerical Analysis*, 46(2):996–1011, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Burger:2002:NAS**

[BM02] Martin Burger and Wolfram Mühlhuber. Numerical approximation of an SQP-type method for parameter identification. *SIAM Journal on Numerical Analysis*, 40(5):1775–1797, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38998>.

**Bellavia:2006:STR**

- [BM06] Stefania Bellavia and Benedetta Morini. Subspace trust-region methods for large bound-constrained nonlinear equations. *SIAM Journal on Numerical Analysis*, 44(4):1535–1555, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Berndt:2005:AFOb**

- [BMM05] Markus Berndt, Thomas A. Manteuffel, and Stephen F. McCormick. Analysis of first-order system least squares (FOSLS) for elliptic problems with discontinuous coefficients: Part II. *SIAM Journal on Numerical Analysis*, 43(1):409–436, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42769>.

**Berndt:2005:AFOa**

- [BMMS05] Markus Berndt, Thomas A. Manteuffel, Stephen F. McCormick, and Gerhard Starke. Analysis of first-order system least squares (FOSLS) for elliptic problems with discontinuous coefficients: Part I. *SIAM Journal on Numerical Analysis*, 43(1):386–408, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42768>.

**Bansch:2002:AUF**

- [BMN02] Eberhard Bänsch, Pedro Morin, and Ricardo H. Nochetto. An adaptive Uzawa FEM for the Stokes problem: Convergence without the inf-sup condition. *SIAM Journal on Numerical Analysis*, 40(4):1207–1229, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39213>.

**Bansch:2004:SDG**

- [BMN04] Eberhard Bänsch, Pedro Morin, and Ricardo H. Nochetto. Surface diffusion of graphs: Variational formulation, error analysis, and simulation. *SIAM Journal on Numerical Analysis*, 42(2):773–799, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41927>.

**Bensoussan:2009:UWF**

- [BMPT09] Alain Bensoussan, Laurent Mertz, Olivier Pironneau, and Janos Turi. An ultra weak finite element method as an alternative to a Monte Carlo method for an elasto-plastic problem with noise. *SIAM Journal on Numerical Analysis*, 47(5):3374–3396, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).



- [BMZ09] **Bokanowski:2009:SCR**  
Olivier Bokanowski, Stefania Maroso, and Hasnaa Zidani. Some convergence results for Howard's algorithm. *SIAM Journal on Numerical Analysis*, 47(4):3001–3026, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BN07] **Beuchler:2007:OAS**  
Sven Beuchler and Sergey V. Nepomnyaschikh. Overlapping additive Schwarz preconditioners for elliptic problems with degenerate locally anisotropic coefficients. *SIAM Journal on Numerical Analysis*, 45(6):2321–2344, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BNS04] **Barrett:2004:FEA**  
John W. Barrett, Robert Nürnberg, and Vanessa Styles. Finite element approximation of a phase field model for void electromigration. *SIAM Journal on Numerical Analysis*, 42(2):738–772, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41342>.
- [BNT07] **Babuska:2007:SCM**  
Ivo Babuška, Fabio Nobile, and Raúl Tempone. A stochastic collocation method for elliptic partial differential equations with random input data. *SIAM Journal on Numerical Analysis*, 45(3):1005–1034, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BNV06a] **Bermudez:2006:NACa**  
Alfredo Bermúdez, Maria R. Nogueiras, and Carlos Vázquez. Numerical analysis of convection-diffusion-reaction problems with higher order characteristics/finite elements. Part I: Time discretization. *SIAM Journal on Numerical Analysis*, 44(5):1829–1853, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BNV06b] **Bermudez:2006:NACb**  
Alfredo Bermúdez, Maria R. Nogueiras, and Carlos Vázquez. Numerical analysis of convection-diffusion-reaction problems with higher order characteristics/finite elements. Part II: Fully discretized scheme and quadrature formulas. *SIAM Journal on Numerical Analysis*, 44(5):1854–1876, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BNW06] **Barrett:2006:FEA**  
John W. Barrett, Robert Nürnberg, and Mark R. E. Warner. Finite element approximation of soluble surfactant spreading on a thin film. *SIAM Journal on Numerical Analysis*,

44(3):1218–1247, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Bohmer:2008:FEM**

[Böh08]

Klaus Böhmer. On finite element methods for fully nonlinear elliptic equations of second order. *SIAM Journal on Numerical Analysis*, 46(3):1212–1249, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Bar-On:2000:RST**

[BOL00]

Ilan Bar-On and Mauro Leoncini. Reliable solution of tridiagonal systems of linear equations. *SIAM Journal on Numerical Analysis*, 38(4):1134–1153, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34799>.

**Berland:2005:BSO**

[BOS05]

Havard Berland, Brynjulf Owren, and Bard Skaflestad. B-series and order conditions for exponential integrators. *SIAM Journal on Numerical Analysis*, 43(4):1715–1727, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61268>.

**Boscarino:2007:EAI**

[Bos07]

Sebastiano Boscarino. Error analysis of IMEX Runge–

Kutta methods derived from differential-algebraic systems. *SIAM Journal on Numerical Analysis*, 45(4):1600–1621, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Böttcher:2006:PTS**

[Böt06]

Albrecht Böttcher. On the problem of testing the structure of a matrix by displacement operations. *SIAM Journal on Numerical Analysis*, 44(1):41–54, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Boyd:2002:CZR**

[Boy02]

John P. Boyd. Computing zeros on a real interval through Chebyshev expansion and polynomial rootfinding. *SIAM Journal on Numerical Analysis*, 40(5):1666–1682, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39832>.

**Bojanov:2005:GIQ**

[BP05]

Borislav Bojanov and Petar Petrov. Gaussian interval quadrature formulae for Tchebycheff systems. *SIAM Journal on Numerical Analysis*, 43(2):787–795, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60652>.

- [BP06a] **Bartels:2006:CIF**  
Sören Bartels and Andreas Prohl. Convergence of an implicit finite element method for the Landau–Lifshitz–Gilbert equation. *SIAM Journal on Numerical Analysis*, 44(4):1405–1419, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BP06b] **Buffa:2006:DGA**  
Annalisa Buffa and Iliaria Perugia. Discontinuous Galerkin approximation of the Maxwell eigenproblem. *SIAM Journal on Numerical Analysis*, 44(5):2198–2226, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BPD08] **Brix:2008:MPI**  
Kolja Brix, Martin Campos Pinto, and Wolfgang Dahmen. A multilevel preconditioner for the interior penalty discontinuous Galerkin method. *SIAM Journal on Numerical Analysis*, 46(5):2742–2768, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BPS09] **Banas:2009:MTA**  
L’ubomír Bañas, Andreas Prohl, and Marián Slodička. Modeling of thermally assisted magnetodynamics. *SIAM Journal on Numerical Analysis*, 47(1):551–574, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BPV01] **Brunner:2001:PPC**  
Hermann Brunner, Arvet Pedas, and Gennadi Vainikko. Piecewise polynomial collocation methods for linear Volterra integro-differential equations with weakly singular kernels. *SIAM Journal on Numerical Analysis*, 39(3):957–982, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37656>.
- [BR05] **Bossavit:2005:PRO**  
Alain Bossavit and Francesca Rapetti. A prolongation/restriction operator for Whitney elements on simplicial meshes. *SIAM Journal on Numerical Analysis*, 43(5):2077–2097, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60492>.
- [BR09a] **Beckermann:2009:EEE**  
Bernhard Beckermann and Lothar Reichel. Error estimates and evaluation of matrix functions via the Faber transform. *SIAM Journal on Numerical Analysis*, 47(5):3849–3883, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [BR09b] **Bochev:2009:OBA**  
 Pavel B. Bochev and Denis Ridzal. An optimization-based approach for the design of PDE solution algorithms. *SIAM Journal on Numerical Analysis*, 47(5):3938–3955, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BR09c] **Bochev:2009:RLO**  
 Pavel B. Bochev and Denis Ridzal. Rehabilitation of the lowest-order Raviart–Thomas element on quadrilateral grids. *SIAM Journal on Numerical Analysis*, 47(1):487–507, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Bre03] **Brenner:2003:PFI**  
 Susanne C. Brenner. Poincaré–Friedrichs inequalities for piecewise  $H^1$  functions. *SIAM Journal on Numerical Analysis*, 41(1):306–324, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40131>.
- [Bre05] **Breuss:2005:IUM**  
 Michael Breuss. The implicit upwind method for 1-D scalar conservation laws with continuous fluxes. *SIAM Journal on Numerical Analysis*, 43(3):970–986, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41010>.
- [BRLM03] **Bernardi:2003:MTC**  
 C. Bernardi, T. Chacon Rebollo, R. Lewandowski, and F. Murat. A model for two coupled turbulent fluids Part II: Numerical analysis of a spectral discretization. *SIAM Journal on Numerical Analysis*, 40(6):2368–2394, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38582>.
- [BRS02] **Bermudez:2002:FEM**  
 Alfredo Bermúdez, Rodolfo Rodríguez, and Pilar Salgado. A finite element method with Lagrange multipliers for low-frequency harmonic Maxwell equations. *SIAM Journal on Numerical Analysis*, 40(5):1823–1849, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39078>.
- [BRS08] **Bermudez:2008:FEM**  
 Alfredo Bermúdez, Rodolfo Rodríguez, and Pilar Salgado. A finite element method for the magnetostatic problem in terms of scalar potentials. *SIAM Journal on Numerical Analysis*, 46(3):1338–1363, 2008. CO-

DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Buttner:2003:TID**

- [BS03] Jörg Buttner and Bernd Simeon. Time integration of the dual problem of elastoplasticity by Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 41(4):1564–1584, January 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Brunner:2006:HDG**

- [BS06] Hermann Brunner and Dominik Schötzau. hp-discontinuous Galerkin time-stepping for Volterra integrodifferential equations. *SIAM Journal on Numerical Analysis*, 44(1):224–245, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Banjai:2007:RGE**

- [BS07] L. Banjai and S. Sauter. A refined Galerkin error and stability analysis for highly indefinite variational problems. *SIAM Journal on Numerical Analysis*, 45(1):37–53, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Banjai:2008:RSW**

- [BS08] L. Banjai and S. Sauter. Rapid solution of the wave equation in unbounded domains. *SIAM Journal on Numerical Analysis*,

47(1):227–249, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Burman:2009:LOD**

- [BS09] E. Burman and B. Stamm. Low order discontinuous Galerkin methods for second order elliptic problems. *SIAM Journal on Numerical Analysis*, 47(1):508–533, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Beckermann:2007:ASF**

- [BSC07] Bernhard Beckermann and Stefano Serra-Capizzano. On the asymptotic spectrum of finite element matrix sequences. *SIAM Journal on Numerical Analysis*, 45(2):746–769, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Belhachmi:2005:MFE**

- [BSES05] Z. Belhachmi, J. M. Sac-Epée, and J. Sokolowski. Mixed finite element methods for smooth domain formulation of crack problems. *SIAM Journal on Numerical Analysis*, 43(3):1295–1320, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42972>.

**Bailly:2000:ORF**

- [BT00] B. Le Bailly and J. P. Thiran. Optimal rational functions

for the generalized Zolotarev problem in the complex plane. *SIAM Journal on Numerical Analysis*, 38(5):1409–1424, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36068>.

[BTZ04]

**Burrage:2002:PCM**

[BT02]

Kevin Burrage and Tianhai Tian. Predictor-corrector methods of Runge–Kutta type for stochastic differential equations. *SIAM Journal on Numerical Analysis*, 40(4):1516–1537, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37267>.

[Bue07]

**Boumenir:2007:SEH**

[BT07]

Amin Boumenir and Vu Kim Tuan. Sampling eigenvalues in Hardy spaces. *SIAM Journal on Numerical Analysis*, 45(2):473–483, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

[Buf05]

**Badea:2003:CRA**

[BTW03]

Lori Badea, Xue-Cheng Tai, and Junping Wang. Convergence rate analysis of a multiplicative Schwarz method for variational inequalities. *SIAM Journal on Numerical Analysis*, 41(3):1052–1073, June 2003. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39360>.

**Babuska:2004:GFE**

Ivo Babuska, Raúl Tempone, and Georgios E. Zouraris. Galerkin finite element approximations of stochastic elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 42(2):800–825, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41868>.

**Bueler:2007:EBA**

Ed Bueler. Error bounds for approximate eigenvalues of periodic-coefficient linear delay differential equations. *SIAM Journal on Numerical Analysis*, 45(6):2510–2536, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Buffa:2005:RDS**

Annalisa Buffa. Remarks on the discretization of some noncoercive operator with applications to heterogeneous Maxwell equations. *SIAM Journal on Numerical Analysis*, 43(1):1–18, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42385>.

- Burger:2001:IRP**
- [Bur01] Martin Burger. Iterative regularization of a parameter identification problem occurring in polymer crystallization. *SIAM Journal on Numerical Analysis*, 39(3):1029–1055, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36377>.
- Burman:2005:UAC**
- [Bur05] Erik Burman. A unified analysis for conforming and nonconforming stabilized finite element methods using interior penalty. *SIAM Journal on Numerical Analysis*, 43(5):2012–2033, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43737>.
- Burman:2009:PEE**
- [Bur09] Erik Burman. A posteriori error estimation for interior penalty finite element approximations of the advection-reaction equation. *SIAM Journal on Numerical Analysis*, 47(5):3584–3607, ??? 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Buckwar:2006:MMS**
- [BW06] Evelyn Buckwar and Renate Winkler. Multistep methods for SDEs and their application to problems with small noise. *SIAM Journal on Numerical Analysis*, 44(2):779–803, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Bao:2007:MMC**
- [BW07] Weizhu Bao and Hanquan Wang. A mass and magnetization conservative and energy-diminishing numerical method for computing ground state of spin-1 Bose–Einstein condensates. *SIAM Journal on Numerical Analysis*, 45(5):2177–2200, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Brown:2008:UAF**
- [BWWW08] Peter N. Brown, Homer F. Walker, Rebecca Wasyk, and Carol S. Woodward. On using approximate finite differences in matrix-free Newton–Krylov methods. *SIAM Journal on Numerical Analysis*, 46(4):1892–1911, ??? 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Bojanov:2002:HIP**
- [BX02] Borislav Bojanov and Yuan Xu. On a Hermite interpolation by polynomials of two variables. *SIAM Journal on Numerical Analysis*, 39(5):1780–1793, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/>

- dbq/article/38347. See erratum [BX07].
- [BX03a] Randolph E. Bank and Jinchao Xu. Asymptotically exact A posteriori error estimators, Part I: Grids with superconvergence. *SIAM Journal on Numerical Analysis*, 41(6):2294–2312, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39874>.
- [BX03b] Randolph E. Bank and Jinchao Xu. Asymptotically exact A posteriori error estimators, Part II: General unstructured grids. *SIAM Journal on Numerical Analysis*, 41(6):2313–2332, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39875>.
- [BX07] Borislav Bojanov and Yuan Xu. Erratum: On a Hermite interpolation by polynomials of two variables. *SIAM Journal on Numerical Analysis*, 45(4):1799–1800, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). See [BX02].
- [BXZ07] Randolph E. Bank, Jinchao Xu, and Bin Zheng. Superconvergent derivative recovery for Lagrange triangular elements of degree  $p$  on unstructured grids. *SIAM Journal on Numerical Analysis*, 45(5):2032–2046, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [BY00a] Gang Bao and Hongtao Yang. A least-squares finite element analysis for diffraction problems. *SIAM Journal on Numerical Analysis*, 37(2):665–682, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34238>.
- [BY00b] Guo Ben-Yu. Gegenbauer approximation in certain Hilbert spaces and its applications to singular differential equations. *SIAM Journal on Numerical Analysis*, 37(2):621–645, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34216>.
- [ByS06] Susanne C. Brenner and Li yeng Sung. Multigrid algorithms for C0 interior penalty methods. *SIAM Journal on Numerical*

**Bank:2007:SDR****Bank:2003:AEPa****Bao:2000:LSF****Bank:2003:AEPb****Ben-Yu:2000:GAC****Bojanov:2007:EHI****Brenner:2006:MAC**



*Analysis*, 44(1):199–223, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Bergounioux:2002:FDA**

[BZ02]

Maitine Bergounioux and Housnaa Zidani. A fully discrete approximation for control problems governed by parabolic variational inequalities. *SIAM Journal on Numerical Analysis*, 39(6):2014–2033, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37340>.

**Bonnans:2003:CGF**

[BZ03]

J. Frédéric Bonnans and Housnaa Zidani. Consistency of generalized finite difference schemes for the stochastic HJB equation. *SIAM Journal on Numerical Analysis*, 41(3):1008–1021, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38733>.

**Burman:2006:DDM**

[BZ06]

Erik Burman and Paolo Zunino. A domain decomposition method based on weighted interior penalties for advection-diffusion-reaction problems. *SIAM Journal on Numerical Analysis*, 44(4):1612–1638, January 2006. CODEN SJNAAM. ISSN 0036-

1429 (print), 1095-7170 (electronic).

**Cai:2000:LSP**

[Cai00]

Zhiqiang Cai. Least squares for the perturbed Stokes equations and the Reissner–Mindlin plate. *SIAM Journal on Numerical Analysis*, 38(5):1561–1581, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35015>.

**Cai:2003:CTN**

[Cai03]

Yuzhi Cai. Convergence theory of a numerical method for solving the Chapman–Kolmogorov equation. *SIAM Journal on Numerical Analysis*, 40(6):2337–2351, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39036>.

**Cantarella:2005:CWS**

[Can05]

Jason Cantarella. On comparing the writhe of a smooth curve to the writhe of an inscribed polygon. *SIAM Journal on Numerical Analysis*, 42(5):1846–1861, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40316>.

- [Cao05] **Cao:2005:ELI**  
 Weiming Cao. On the error of linear interpolation and the orientation, aspect ratio, and internal angles of a triangle. *SIAM Journal on Numerical Analysis*, 43(1):19–40, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43349>.
- [Cao07] **Cao:2007:IEE**  
 Weiming Cao. An interpolation error estimate on anisotropic meshes in  $\mathcal{R}^n$  and optimal metrics for mesh refinement. *SIAM Journal on Numerical Analysis*, 45(6):2368–2391, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Car02] **Carstensen:2002:RBP**  
 Carsten Carstensen. Residual-based A posteriori error estimate for a nonconforming Reissner–Mindlin plate finite element. *SIAM Journal on Numerical Analysis*, 39(6):2034–2044, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37147>.
- [Car05] **Carstensen:2005:EHS**  
 Carsten Carstensen. Estimation of higher Sobolev norm from lower order approximation. *SIAM Journal on Numerical Analysis*, 42(5):2136–2147, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41361>.
- [CC04] **Chen:2004:PEE**  
 Zhangxin Chen and Hongsen Chen. Pointwise error estimates of discontinuous Galerkin methods with penalty for second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 42(3):1146–1166, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42152>.
- [CCF09] **Castella:2009:ATH**  
 F. Castella, P. Chartier, and E. Faou. An averaging technique for highly oscillatory Hamiltonian problems. *SIAM Journal on Numerical Analysis*, 47(4):2808–2837, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CCGHR03] **Cao:2003:VMA**  
 Weiming Cao, Ricardo Carretero-González, Weizhang Huang, and Robert D. Russell. Variational mesh adaptation methods for axisymmetrical problems. *SIAM Journal on Numerical Analysis*, 41(1):235–257, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-

7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40159>.

**Castillo:2000:PEA**

- [CCPS00] Paul Castillo, Bernardo Cockburn, Ilaria Perugia, and Dominik Schötzau. An A priori error analysis of the local discontinuous Galerkin method for elliptic problems. *SIAM Journal on Numerical Analysis*, 38(5):1676–1706, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37100>.

**Celiker:2006:LFO**

- [CCS06] Fatih Celiker, Bernardo Cockburn, and Henryk K. Stolarski. Locking-free optimal discontinuous Galerkin methods for Timoshenko beams. *SIAM Journal on Numerical Analysis*, 44(6):2297–2325, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Cao:2002:MAA**

- [CCZ02] Li-Qun Cao, Jun-Zhi Cui, and De-Chao Zhu. Multiscale asymptotic analysis and numerical simulation for the second order Helmholtz equations with rapidly oscillating coefficients over general convex domains. *SIAM Journal on Numerical Analysis*, 40(2):543–577, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-

7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37611>.

**Chen:2001:AGM**

- [CD01] Zhiming Chen and Shibin Dai. Adaptive Galerkin methods with error control for a dynamical Ginzburg–Landau model in superconductivity. *SIAM Journal on Numerical Analysis*, 38(6):1961–1985, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34910>.

**Cohen:2003:AWS**

- [CD03] Albert Cohen and Wolfgang Dahmen. Adaptive wavelet schemes for nonlinear variational problems. *SIAM Journal on Numerical Analysis*, 41(5):1785–1823, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41226>.

**Carstensen:2004:TSD**

- [CD04] Carsten Carstensen and Georg Dolzmann. Time-space discretization of the nonlinear hyperbolic system  $u_t t = \text{div}(\sigma(Du) + Du_t)$ . *SIAM Journal on Numerical Analysis*, 42(1):75–89, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37611>.

[//epubs.siam.org/sam-bin/dbq/article/39341](http://epubs.siam.org/sam-bin/dbq/article/39341).

**Cockburn:2008:OCO**

- [CDG08] Bernardo Cockburn, Bo Dong, and Johnny Guzmán. Optimal convergence of the original DG method for the transport-reaction equation on special meshes. *SIAM Journal on Numerical Analysis*, 46(3):1250–1265, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Cai:2003:RAS**

- [CDS03] Xiao-Chuan Cai, Maksymilian Dryja, and Marcus Sarkis. Restricted additive Schwarz preconditioners with harmonic overlap for symmetric positive definite linear systems. *SIAM Journal on Numerical Analysis*, 41(4):1209–1231, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38962>.

**Chen:2000:FEM**

- [CDZ00] Zhiming Chen, Qiang Du, and Jun Zou. Finite element methods with matching and nonmatching meshes for Maxwell equations with discontinuous coefficients. *SIAM Journal on Numerical Analysis*, 37(5):1542–1570, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39341>.

[//epubs.siam.org/sam-bin/dbq/article/34997](http://epubs.siam.org/sam-bin/dbq/article/34997).

**Chung:2003:CAF**

- [CDZ03] Eric T. Chung, Qiang Du, and Jun Zou. Convergence analysis of a finite volume method for Maxwell’s equations in non-homogeneous media. *SIAM Journal on Numerical Analysis*, 41(1):37–63, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39845>.

**Chung:2005:CAF**

- [CE05] Eric T. Chung and Bjorn Engquist. Convergence analysis of fully discrete finite volume methods for Maxwell’s equations in nonhomogeneous media. *SIAM Journal on Numerical Analysis*, 43(1):303–317, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43544>.

**Chung:2006:ODG**

- [CE06] Eric T. Chung and Björn Engquist. Optimal discontinuous Galerkin methods for wave propagation. *SIAM Journal on Numerical Analysis*, 44(5):2131–2158, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [CE09] **Chung:2009:ODG**  
Eric T. Chung and Björn Engquist. Optimal discontinuous Galerkin methods for the acoustic wave equation in higher dimensions. *SIAM Journal on Numerical Analysis*, 47(5):3820–3848, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CEJS02] **Chen:2002:EAC**  
Zhangxin Chen, Richard E. Ewing, Qiaoyuan Jiang, and Anna M. Spagnuolo. Error analysis for characteristics-based methods for degenerate parabolic problems. *SIAM Journal on Numerical Analysis*, 40(4):1491–1515, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37068>.
- [CET09] **Carey:2009:PAA**  
V. Carey, D. Estep, and S. Tavener. A posteriori analysis and adaptive error control for multiscale operator decomposition solution of elliptic systems I: Triangular systems. *SIAM Journal on Numerical Analysis*, 47(1):740–761, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CF03] **Copetti:2003:NST**  
M. I. M. Copetti and D. A. French. Numerical solution of a thermoviscoelastic contact problem by a penalty method. *SIAM Journal on Numerical Analysis*, 41(4):1487–1504, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40366>.
- [CF07] **Cristiani:2007:FSL**  
Emiliano Cristiani and Maurizio Falcone. Fast semi-Lagrangian schemes for the eikonal equation and applications. *SIAM Journal on Numerical Analysis*, 45(5):1979–2011, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CFFM08] **Carlini:2008:CGF**  
E. Carlini, M. Falcone, N. Forcadel, and R. Monneau. Convergence of a generalized fast-marching method for an eikonal equation with a velocity-changing sign. *SIAM Journal on Numerical Analysis*, 46(6):2920–2952, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CFR00] **Caorsi:2000:CGF**  
Salvatore Caorsi, Paolo Fernandes, and Mirco Raffetto. On the convergence of Galerkin finite element approximations of electromagnetic eigenproblems. *SIAM Journal on Numerical Analysis*, 38(2):580–607, April 2000. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35750>.

**Camilli:2000:NAM**

[CG00]

Fabio Camilli and Lars Grüne. Numerical approximation of the maximal solutions for a class of degenerate Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 38(5):1540–1560, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34798>.

**Cockburn:2004:CHM**

[CG04]

Bernardo Cockburn and Jayadeep Gopalakrishnan. A characterization of hybridized mixed methods for second order elliptic problems. *SIAM Journal on Numerical Analysis*, 42(1):283–301, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41789>.

**Cockburn:2005:IFEa**

[CG05a]

Bernardo Cockburn and Jayadeep Gopalakrishnan. Incompressible finite elements via hybridization. Part I: The Stokes system in two space dimensions. *SIAM Journal on Numerical Analysis*, 43(4):1627–1650, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-

7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61060>.

**Cockburn:2005:IFEb**

[CG05b]

Bernardo Cockburn and Jayadeep Gopalakrishnan. Incompressible finite elements via hybridization. Part II: The Stokes system in three space dimensions. *SIAM Journal on Numerical Analysis*, 43(4):1651–1672, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61065>.

**Cockburn:2008:EER**

Bernardo Cockburn and Johnny Guzmán. Error estimates for the Runge–Kutta discontinuous Galerkin method for the transport equation with discontinuous initial data. *SIAM Journal on Numerical Analysis*, 46(3):1364–1398, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Cockburn:2009:DHD**

Bernardo Cockburn and Jayadeep Gopalakrishnan. The derivation of hybridizable discontinuous Galerkin methods for Stokes flow. *SIAM Journal on Numerical Analysis*, 47(2):1092–1125, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [CGH05] **Chen:2005:SMB** Q.-Y. Chen, D. Gottlieb, and J. S. Hesthaven. Spectral methods based on prolate spheroidal wave functions for hyperbolic PDEs. *SIAM Journal on Numerical Analysis*, 43(5):1912–1933, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43242>.
- [CGSS09] **Cockburn:2009:AED** Bernardo Cockburn, Johnny Guzmán, See-Chew Soon, and Henry K. Stolarski. An analysis of the embedded discontinuous Galerkin method for second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 47(4):2686–2707, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CGL09] **Cockburn:2009:UHD** Bernardo Cockburn, Jayadeep Gopalakrishnan, and Raytcho Lazarov. Unified hybridization of discontinuous galerkin, mixed, and continuous Galerkin methods for second order elliptic problems. *SIAM Journal on Numerical Analysis*, 47(2):1319–1365, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CGLGP08] **Castro:2008:WBH** Manuel Castro, José M. Galardo, Juan A. López-García, and Carlos Parés. Well-balanced high order extensions of Godunov’s method for semilinear balance laws. *SIAM Journal on Numerical Analysis*, 46(2):1012–1039, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CH02] **Chrysafinos:2002:EES** K. Chrysafinos and L. S. Hou. Error estimates for semidiscrete finite element approximations of linear and semilinear parabolic equations under minimal regularity assumptions. *SIAM Journal on Numerical Analysis*, 40(1):282–306, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37799>.
- [Cha07] **Chang:2007:SFT** Kou-Kung Alex Chang. The stability of front-tracking scheme

- for two spatial dimensional miscible two phase flow. *SIAM Journal on Numerical Analysis*, 45(3):1045–1063, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Che06]
- Chainais-Hillairet:2007:CAM**
- [CHD07] Claire Chainais-Hillairet and Jérôme Droniou. Convergence analysis of a mixed finite volume scheme for an elliptic-parabolic system modeling miscible fluid flows in porous media. *SIAM Journal on Numerical Analysis*, 45(5):2228–2258, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Chen:2000:FNM**
- [Che00] Zhangxin Chen. Formulations and numerical methods of the black oil model in porous media. *SIAM Journal on Numerical Analysis*, 38(2):489–514, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30426>.
- Chen:2002:CSR**
- [Che02] Di-Rong Chen. Construction of smooth refinable function vectors by cascade algorithms. *SIAM Journal on Numerical Analysis*, 40(4):1354–1368, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39261>.
- Chen:2006:PEE**
- Hongsen Chen. Pointwise error estimates for finite element solutions of the Stokes problem. *SIAM Journal on Numerical Analysis*, 44(1):1–28, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Carpio:2001:NSH**
- [CHK01] A. Carpio, P. Hernando, and M. Kindelan. Numerical study of hyperbolic equations with integral constraints arising in semiconductor theory. *SIAM Journal on Numerical Analysis*, 39(1):168–191, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36028>.
- Connors:2009:PTS**
- [CHL09] Jeffrey M. Connors, Jason S. Howell, and William J. Layton. Partitioned time stepping for a parabolic two domain problem. *SIAM Journal on Numerical Analysis*, 47(5):3526–3549, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Carstensen:2007:FPE**
- [CHO07] Carsten Carstensen, Jun Hu, and Antonio Orlando. Framework for the A posteriori error analysis of nonconforming finite



- elements. *SIAM Journal on Numerical Analysis*, 45(1):68–82, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Chu00]
- Cohen:2004:AWG**
- [CHR04] Albert Cohen, Marc Hoffmann, and Markus Reiss. Adaptive wavelet Galerkin methods for linear inverse problems. *SIAM Journal on Numerical Analysis*, 42(4):1479–1501, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41179>. [CHX03]
- Christiansen:2005:DCL**
- [Chr05] Snorre H. Christiansen. A div-curl lemma for edge elements. *SIAM Journal on Numerical Analysis*, 43(1):116–126, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43380>.
- Chen:2000:NAN**
- [CHS00] Jiuhua Chen, Weimin Han, and Mircea Sofonea. Numerical analysis of a nonlinear evolutionary system with applications in viscoplasticity. *SIAM Journal on Numerical Analysis*, 38(4):1171–1199, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34842>. [CI06]
- Chu:2000:FRA**
- Moody T. Chu. A fast recursive algorithm for constructing matrices with prescribed eigenvalues and singular values. *SIAM Journal on Numerical Analysis*, 37(3):1004–1020, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33930>.
- Cao:2003:HCM**
- [CHX03] Yanzhao Cao, Terry Herdman, and Yuesheng Xu. A hybrid collocation method for Volterra integral equations with weakly singular kernels. *SIAM Journal on Numerical Analysis*, 41(1):364–381, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38559>.
- Chen:2007:FEA**
- [CHX07] Long Chen, Michael J. Holst, and Jinchao Xu. The finite element approximation of the nonlinear Poisson–Boltzmann equation. *SIAM Journal on Numerical Analysis*, 45(6):2298–2320, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Coleman:2006:TEE**
- [CI06] J. P. Coleman and L. Gr. Ixaru. Truncation errors in exponential fitting for oscillatory prob-

- lems. *SIAM Journal on Numerical Analysis*, 44(4):1441–1465, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [CK01]
- Camilli:2009:FEL**
- [CJ09] Fabio Camilli and Espen R. Jakobsen. A finite element like scheme for integro-partial differential Hamilton–Jacobi–Bellman equations. *SIAM Journal on Numerical Analysis*, 47(4):2407–2431, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Cohen:2001:HOT**
- [CJRT01] G. Cohen, P. Joly, J. E. Roberts, and N. Tordjman. Higher order triangular finite elements with mass lumping for the wave equation. *SIAM Journal on Numerical Analysis*, 38(6):2047–2078, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32955>.
- Chou:2000:MCM**
- [CK00] So-Hsiang Chou and Do Y. Kwak. Mixed covolume methods on rectangular grids for elliptic problems. *SIAM Journal on Numerical Analysis*, 37(3):758–771, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30553>.
- Cai:2001:FEM**
- Zhiqiang Cai and Seokchan Kim. A finite element method using singular functions for the Poisson equation: Corner singularities. *SIAM Journal on Numerical Analysis*, 39(1):286–299, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35594>.
- Cai:2006:NEE**
- [CK06a] Zhiqiang Cai and Jaeun Ku. The  $L^2$  norm error estimates for the div least-squares method. *SIAM Journal on Numerical Analysis*, 44(4):1721–1734, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Chand:2006:GCS**
- [CK06b] A. K. B. Chand and G. P. Kapoor. Generalized cubic spline fractal interpolation functions. *SIAM Journal on Numerical Analysis*, 44(2):655–676, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Chou:2001:GFC**
- [CKK01] So-Hsiang Chou, Do Y. Kwak, and Kwang Y. Kim. A general framework for constructing and analyzing mixed finite volume methods on quadrilateral grids:

- The overlapping covolume case. *SIAM Journal on Numerical Analysis*, 39(4):1170–1196, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37544>.
- [CKK02] So-Hsiang Chou, Do Y. Kwak, and Kwang Y. Kim. Flux recovery from primal hybrid finite element methods. *SIAM Journal on Numerical Analysis*, 40(2):403–415, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38126>.
- [CKNS08] J. Manuel Cascon, Christian Kreuzer, Ricardo H. Nochetto, and Kunibert G. Siebert. Quasi-optimal convergence rate for an adaptive finite element method. *SIAM Journal on Numerical Analysis*, 46(5):2524–2550, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CKPS01] Bernardo Cockburn, Guido Kanschat, Ilaria Perugia, and Dominik Schötzau. Superconvergence of the local discontinuous Galerkin method for elliptic problems on Cartesian grids. *SIAM Journal on Numerical Analysis*, 39(1):264–285, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37154>.
- [CKR07] Alina Chertock, Alexander Kurganov, and Yurii Rykov. A new sticky particle method for pressureless gas dynamics. *SIAM Journal on Numerical Analysis*, 45(6):2408–2441, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CKR08] G. M. Coclite, K. H. Karlsen, and N. H. Risebro. A convergent finite difference scheme for the Camassa–Holm equation with general  $H^1$  initial data. *SIAM Journal on Numerical Analysis*, 46(3):1554–1579, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CKSS02] Bernardo Cockburn, Guido Kanschat, Dominik Schötzau, and Christoph Schwab. Local discontinuous Galerkin methods for the Stokes system. *SIAM Journal on Numerical Analysis*, 40(1):319–343, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38012>.

- [CL00] **Cinzori:2000:FPR**  
 Aaron C. Cinzori and Patricia K. Lamm. Future polynomial regularization of ill-posed Volterra equations. *SIAM Journal on Numerical Analysis*, 37(3):949–979, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34735>.
- [CL05a] **Chatzipantelidis:2005:EEF**  
 P. Chatzipantelidis and R. D. Lazarov. Error estimates for a finite volume element method for elliptic PDEs in nonconvex polygonal domains. *SIAM Journal on Numerical Analysis*, 42(5):1932–1958, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42763>.
- [CL05b] **Chen:2005:APM**  
 Zhiming Chen and Xuezhe Liu. An adaptive perfectly matched layer technique for time-harmonic scattering problems. *SIAM Journal on Numerical Analysis*, 43(2):645–671, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61033>.
- [CLG05] **Calhoun-Lopez:2005:FEM**  
 Marcus Calhoun-Lopez and Max D. Gunzburger. A finite element, multiresolution viscosity method for hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 43(5):1988–2011, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43938>.
- [CLT05] **Carstensen:2005:EAP**  
 C. Carstensen, R. Lazarov, and S. Tomov. Explicit and averaging A posteriori error estimates for adaptive finite volume methods. *SIAM Journal on Numerical Analysis*, 42(6):2496–2521, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42542>.
- [CLW04] **Cai:2004:LSMb**  
 Zhiqiang Cai, Barry Lee, and Ping Wang. Least-squares methods for incompressible Newtonian fluid flow: Linear stationary problems. *SIAM Journal on Numerical Analysis*, 42(2):843–859, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42267>.
- [CM00] **Coyle:2000:STH**  
 Joe Coyle and Peter Monk. Scattering of time-harmonic electromagnetic waves by anisotropic

- inhomogeneous scatterers or impenetrable obstacles. *SIAM Journal on Numerical Analysis*, 37(5):1590–1617, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34951>.
- [CM01] Frédéric Cao and Lionel Moisan. Geometric computation of curvature driven plane curve evolutions. *SIAM Journal on Numerical Analysis*, 39(2):624–646, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36386>.
- [CM08] Xiaojun Chen and Sayed Mahmoud. Implicit Runge–Kutta methods for Lipschitz continuous ordinary differential equations. *SIAM Journal on Numerical Analysis*, 46(3):1266–1280, ??? 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CMM03] A. L. Codd, T. A. Manteuffel, and S. F. McCormick. Multilevel first-order system least squares for nonlinear elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 41(6):2197–2209, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40440>.
- [CMMR01] Z. Cai, T. A. Manteuffel, S. F. McCormick, and J. Ruge. First-order system  $\mathcal{LL}^*$  (FOSLL\*): Scalar elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 39(4):1418–1445, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38804>.
- [CMMR03] A. L. Codd, T. A. Manteuffel, S. F. McCormick, and J. W. Ruge. Multilevel first-order system least squares for elliptic grid generation. *SIAM Journal on Numerical Analysis*, 41(6):2210–2232, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40441>.
- [CMR09] Andrea Cangiani, Gianmarco Manzini, and Alessandro Russo. Convergence analysis of the mimetic finite difference method for elliptic problems. *SIAM Journal on Numerical Analysis*, 47(4):2612–2637, ??? 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40440>.

Cao:2001:GCC

Cai:2001:FOS

Chen:2008:IRK

Codd:2003:MFOb

Codd:2003:MFOa

Cangiani:2009:CAM

- 1429 (print), 1095-7170 (electronic).
- [CMS00] **Cai:2000:MNA**  
 Xiao-Chuan Cai, Tarek P. Mathew, and Marcus V. Sarkis. Maximum norm analysis of overlapping nonmatching grid discretizations of elliptic equations. *SIAM Journal on Numerical Analysis*, 37(5):1709–1728, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34874>.
- [CMX02] **Chen:2002:FCM**  
 Zhongying Chen, Charles A. Micchelli, and Yuesheng Xu. Fast collocation methods for second kind integral equations. *SIAM Journal on Numerical Analysis*, 40(1):344–375, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38937>.
- [CMX09] **Cai:2009:NSM**  
 Mingchao Cai, Mo Mu, and Jinchao Xu. Numerical solution to a mixed Navier–Stokes/Darcy model by the two-grid approach. *SIAM Journal on Numerical Analysis*, 47(5):3325–3338, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CN01] **Cools:2001:SPA**  
 Ronald Cools and Erich Novak. Spherical product algorithms and the integration of smooth functions with one singular point. *SIAM Journal on Numerical Analysis*, 39(4):1132–1145, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37571>.
- [CN02] **Christiansen:2002:PEF**  
 Snorre H. Christiansen and Jean-Claude Nédélec. A preconditioner for the electric field integral equation based on Calderon formulas. *SIAM Journal on Numerical Analysis*, 40(3):1100–1135, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38873>.
- [CNPS07] **Cavalli:2007:HOR**  
 Fausto Cavalli, Giovanni Naldi, Gabriella Puppo, and Matteo Semplice. High-order relaxation schemes for nonlinear degenerate diffusion problems. *SIAM Journal on Numerical Analysis*, 45(5):2098–2119, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CNQ00] **Chen:2000:SMS**  
 Xiaojun Chen, Zuhair Nashed, and Liqun Qi. Smooth-

- ing methods and semismooth methods for nondifferentiable operator equations. *SIAM Journal on Numerical Analysis*, 38(4):1200–1216, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35671>.
- [CO02] Elena Celledoni and Brynjulf Owren. A class of intrinsic schemes for orthogonal integration. *SIAM Journal on Numerical Analysis*, 40(6):2069–2084, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38514>.
- [Cod09] Ramon Codina. Finite element approximation of the three-field formulation of the Stokes problem using arbitrary interpolations. *SIAM Journal on Numerical Analysis*, 47(1):699–718, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Cop07] M. I. M. Copetti. Numerical analysis of a unilateral problem in planar thermoelasticity. *SIAM Journal on Numerical Analysis*, 45(6):2637–2652, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Cou09] Jean-François Coulombel. Stability of finite difference schemes for hyperbolic initial boundary value problems. *SIAM Journal on Numerical Analysis*, 47(4):2844–2871, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CP00] Carsten Carstensen and Petr Plecháč. Numerical analysis of compatible phase transitions in elastic solids. *SIAM Journal on Numerical Analysis*, 37(6):2061–2081, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33769>.
- [CP03] E. Cuesta and C. Palencia. A numerical method for an integro-differential equation with memory in Banach spaces: Qualitative properties. *SIAM Journal on Numerical Analysis*, 41(4):1232–1241, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40248>.

- [CP05] **Carstensen:2005:NAM**  
 Carsten Carstensen and Dirk Praetorius. Numerical analysis for a macroscopic model in micromagnetics. *SIAM Journal on Numerical Analysis*, 42(6):2633–2651, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43565>.
- [CP08] **Costantini:2008:DAU**  
 Paolo Costantini and Francesca Pelosi. Data approximation using shape-preserving parametric surfaces. *SIAM Journal on Numerical Analysis*, 47(1):20–47, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CPR<sup>+</sup>03] **Cai:2003:DDM**  
 Z. Cai, R. R. Parashkevov, T. F. Russell, J. D. Wilson, and X. Ye. Domain decomposition for a mixed finite element method in three dimensions. *SIAM Journal on Numerical Analysis*, 41(1):181–194, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29693>.
- [CS99] **Chen:1999:PRE**  
 Hsing-Hsia Chen and John C. Strikwerda. Preconditioning for regular elliptic systems. *SIAM Journal on Numerical Analysis*, 37(1):131–151, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33219>.
- [CS01] **Coifman:2001:NMC**  
 Ronald R. Coifman and Artur Sowa. New methods of controlled total variation reduction for digital functions. *SIAM Journal on Numerical Analysis*, 39(2):480–498, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36203>.
- [CS02] **Cai:2002:DFO**  
 Zhiqiang Cai and Byeong Chun Shin. The discrete first-order system least squares: The second-order elliptic boundary value problem. *SIAM Journal on Numerical Analysis*, 40(1):307–318, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38188>.
- [CS03] **Cai:2003:FOS**  
 Zhiqiang Cai and Gerhard Starke. First-order system least squares for the stress-displacement formulation: Linear elasticity. *SIAM Journal on Numerical Analysis*, 41(2):715–730, April 2003. CODEN SJNAAM. ISSN



- 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39696>. [CS08]
- Cai:2004:LSMa**
- [CS04] Zhiqiang Cai and Gerhard Starke. Least-squares methods for linear elasticity. *SIAM Journal on Numerical Analysis*, 42(2):826–842, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41835>. [CT00]
- Causin:2005:DPG**
- [CS05] Paola Causin and Riccardo Sacco. A discontinuous Petrov–Galerkin method with Lagrangian multipliers for second order elliptic problems. *SIAM Journal on Numerical Analysis*, 43(1):280–302, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42787>. [CTU09]
- Cangiani:2007:RFB**
- [CS07] Andrea Cangiani and En-dre Süli. The residual-free-bubble finite element method on anisotropic partitions. *SIAM Journal on Numerical Analysis*, 45(4):1654–1678, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [CU05]
- Chen:2008:AMF**
- Zhangxin Chen and Tatyana Y. Savchuk. Analysis of the multi-scale finite element method for nonlinear and random homogenization problems. *SIAM Journal on Numerical Analysis*, 46(1):260–279, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Chou:2000:CCN**
- So-Hsiang Chou and Shengrong Tang. Conservative  $P^1$  conforming and nonconforming Galerkin FEMs: Effective flux evaluation via a nonmixed method approach. *SIAM Journal on Numerical Analysis*, 38(2):660–680, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36151>.
- Canuto:2009:PEA**
- Claudio Canuto, Timo Tonn, and Karsten Urban. A posteriori error analysis of the reduced basis method for non-affine parametrized nonlinear PDEs. *SIAM Journal on Numerical Analysis*, 47(3):2001–2022, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Canuto:2005:AOC**
- Claudio Canuto and Karsten Urban. Adaptive optimization of convex functionals in

- Banach spaces. *SIAM Journal on Numerical Analysis*, 42(5):2043–2075, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42973>.
- [CV05] Rama Cont and Ekaterina Voltchkova. A finite difference scheme for option pricing in jump diffusion and exponential Lévy models. *SIAM Journal on Numerical Analysis*, 43(4):1596–1626, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43618>.
- [CW03a] Hongsen Chen and Junping Wang. An interior estimate of superconvergence for finite element solutions for second-order elliptic problems on quasi-uniform meshes by local projections. *SIAM Journal on Numerical Analysis*, 41(4):1318–1338, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41003>.
- [CW03b] Zhiming Chen and Haijun Wu. An adaptive finite element method with perfectly matched
- absorbing layers for the wave scattering by periodic structures. *SIAM Journal on Numerical Analysis*, 41(3):799–826, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40090>.
- [CW06a] Xiaojun Chen and Robert S. Womersley. Existence of solutions to systems of underdetermined equations and spherical designs. *SIAM Journal on Numerical Analysis*, 44(6):2326–2341, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CW06b] K. Chrysafinos and Noel J. Walkington. Error estimates for the discontinuous Galerkin methods for parabolic equations. *SIAM Journal on Numerical Analysis*, 44(1):349–366, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CW08a] Z. Cai and C. R. Westphal. A weighted  $H(\text{div})$  least-squares method for second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 46(3):1640–1651, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Cont:2005:FDS****Chen:2006:ESS****Chen:2003:IES****Chrysafinos:2006:EED****Cai:2008:WLS****Chen:2003:AFE**

- [CW08b] **Charalambides:2008:GTM**  
 Marios Charalambides and Fabian Waleffe. Gegenbauer tau methods with and without spurious eigenvalues. *SIAM Journal on Numerical Analysis*, 47(1):48–68, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CW08c] **Charalambides:2008:SJT**  
 Marios Charalambides and Fabian Waleffe. Spectrum of the Jacobi tau approximation for the second derivative operator. *SIAM Journal on Numerical Analysis*, 46(1):280–294, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CW08d] **Cheng:2008:SIS**  
 Wenfang (Wendy) Cheng and Xiaoming Wang. A semi-implicit scheme for stationary statistical properties of the infinite Prandtl number model. *SIAM Journal on Numerical Analysis*, 47(1):250–270, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CWL07] **Chandler-Wilde:2007:GBE**  
 S. N. Chandler-Wilde and S. Langdon. A Galerkin boundary element method for high frequency scattering by convex polygons. *SIAM Journal on Numerical Analysis*, 45(2):610–640, 2007. CO-
- [CW09a] **Cao:2009:FCM**  
 Yanzhao Cao, Bin Wu, and Yuesheng Xu. A fast collocation method for solving stochastic integral equations. *SIAM Journal on Numerical Analysis*, 47(5):3744–3767, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CW09b] **Chen:2009:FMA**  
 Zhongying Chen, Bin Wu, and Yuesheng Xu. Fast multi-level augmentation methods for solving Hammerstein equations. *SIAM Journal on Numerical Analysis*, 47(3):2321–2346, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CX08] **Cai:2008:FFG**  
 Haotao Cai and Yuesheng Xu. A fast Fourier–Galerkin method for solving singular boundary integral equations. *SIAM Journal on Numerical Analysis*, 46(4):1965–1984, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [CY07] **Chou:2007:UAF**  
 So-Hsiang Chou and Xiu Ye. Unified analysis of finite volume methods for second order elliptic problems. *SIAM Journal on Numerical Analysis*, 45

- (4):1639–1653, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [CZ09]
- [CYL08] Yanping Chen, Nianyu Yi, and Wenbin Liu. A Legendre–Galerkin spectral method for optimal control problems governed by elliptic equations. *SIAM Journal on Numerical Analysis*, 46(5):2254–2275, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [CZZ06]
- [CYN00] Raymond H. Chan, Andy M. Yip, and Michael K. Ng. The best circulant preconditioners for Hermitian Toeplitz systems. *SIAM Journal on Numerical Analysis*, 38(3):876–896, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35408>. [Da08]
- [CZ02] Tony F. Chan and H. M. Zhou. ENO-wavelet transforms for piecewise smooth functions. *SIAM Journal on Numerical Analysis*, 40(4):1369–1404, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37091>. [Dar00]
- [Cai:2009:RBE] Zhiqiang Cai and Shun Zhang. Recovery-based error estimator for interface problems: Conforming linear elements. *SIAM Journal on Numerical Analysis*, 47(3):2132–2156, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Chan:2006:SID] Kit Hung Chan, Keke Zhang, and Jun Zou. Spherical interface dynamos: Mathematical theory, finite element approximation, and application. *SIAM Journal on Numerical Analysis*, 44(5):1877–1902, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Da:2008:UBT] Xu Da. Uniform  $l^1$  behavior for time discretization of a Volterra equation with completely monotonic kernel II: Convergence. *SIAM Journal on Numerical Analysis*, 46(1):231–259, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Darve:2000:FMMa] Eric Darve. The fast multipole method. I. Error analysis and asymptotic complexity. *SIAM Journal on Numerical Analysis*, 38(1):98–128, February 2000. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33037>. [DB03b]

**Dawson:2002:LDG**

[Daw02] Clint Dawson. The  $\sqrt{k} + 1 - \int^k$  local discontinuous Galerkin method for elliptic equations. *SIAM Journal on Numerical Analysis*, 40(6):2151–2170, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39759>. [DD04]

**Dawson:2006:ADF**

[Daw06] Clint Dawson. Analysis of discontinuous finite element methods for ground water/surface water coupling. *SIAM Journal on Numerical Analysis*, 44(4):1375–1404, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DD07]

**deBoor:2003:LFM**

[dB03a] Carl de Boor. A Leibniz formula for multivariate divided differences. *SIAM Journal on Numerical Analysis*, 41(3):856–868, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40681>. [DDE03]

**Demkowicz:2003:IEE**

L. Demkowicz and I. Babuska.  $p$  interpolation error estimates for edge finite elements of variable order in two dimensions. *SIAM Journal on Numerical Analysis*, 41(4):1195–1208, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38793>.

**Davies:2004:SCC**

Penny J. Davies and Dugald B. Duncan. Stability and convergence of collocation schemes for retarded potential integral equations. *SIAM Journal on Numerical Analysis*, 42(3):1167–1188, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39532>.

**Demlow:2007:AFE**

Alan Demlow and Gerhard Dziuk. An adaptive finite element method for the Laplace–Beltrami operator on implicitly defined surfaces. *SIAM Journal on Numerical Analysis*, 45(1):421–442, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Deckelnick:2003:EAS**

Klaus Deckelnick, Gerhard Dziuk, and Charles M. Elliott.

- Error analysis of a semidiscrete numerical scheme for diffusion in axially symmetric surfaces. *SIAM Journal on Numerical Analysis*, 41(6):2161–2179, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40538>.
- [DDE05] Klaus Deckelnick, Gerhard Dziuk, and Charles M. Elliott. Fully discrete finite element approximation for anisotropic surface diffusion of graphs. *SIAM Journal on Numerical Analysis*, 43(3):1112–1138, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43487>.
- [DDO07] Sarah Delcourte, Komla Domelevo, and Pascal Omnes. A discrete duality finite volume approach to Hodge decomposition and div-curl problems on almost arbitrary two-dimensional meshes. *SIAM Journal on Numerical Analysis*, 45(3):1142–1174, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DDP00] E. Dari, R. G. Durán, and C. Padra. Maximum norm error estimators for three-dimensional elliptic problems. *SIAM Journal on Numerical Analysis*, 37(2):683–700, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34025>.
- [DDP06] N. Dokeva, M. Dryja, and W. Proskurowski. A FETI-DP preconditioner with a special scaling for mortar discretization of elliptic problems with discontinuous coefficients. *SIAM Journal on Numerical Analysis*, 44(1):283–299, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DDU02] Stephan Dahlke, Wolfgang Dahmen, and Karsten Urban. Adaptive wavelet methods for saddle point problems — optimal convergence rates. *SIAM Journal on Numerical Analysis*, 40(4):1230–1262, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39233>.
- [DE08] Qiang Du and Maria Emelianenko. Uniform convergence of a nonlinear energy-based multilevel quantization scheme. *SIAM Journal on Numerical Analysis*, 46(3):1483–1502, 2008.

**Deckelnick:2005:FDF**

**Dokeva:2006:FDP**

**Delcourte:2007:DDF**

**Dahlke:2002:AWM**

**Dari:2000:MNE**

**Du:2008:UCN**

2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Pietro:2008:DGM**
- [DEG08] Daniele A. Di Pietro, Alexandre Ern, and Jean-Luc Guermond. Discontinuous Galerkin methods for anisotropic semidefinite diffusion with advection. *SIAM Journal on Numerical Analysis*, 46(2):805–831, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Du:2006:CLA**
- [DEJ06] Qiang Du, Maria Emelianenko, and Lili Ju. Convergence of the Lloyd algorithm for computing centroidal Voronoi tessellations. *SIAM Journal on Numerical Analysis*, 44(1):102–119, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Demlow:2002:SOC**
- [Dem02] Alan Demlow. Suboptimal and optimal convergence in mixed finite element methods. *SIAM Journal on Numerical Analysis*, 39(6):1938–1953, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37690>.
- Demlow:2006:LPP**
- [Dem06] Alan Demlow. Localized pointwise a posteriori error estimates for gradients of piecewise linear finite element approximations to second-order quasilinear elliptic problems. *SIAM Journal on Numerical Analysis*, 44(2):494–514, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Demlow:2009:HOF**
- [Dem09] Alan Demlow. Higher-order finite element methods and pointwise error estimates for elliptic problems on surfaces. *SIAM Journal on Numerical Analysis*, 47(2):805–827, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Deng:2003:OPN**
- [Den03] Qingping Deng. An optimal parallel nonoverlapping domain decomposition iterative procedure. *SIAM Journal on Numerical Analysis*, 41(3):964–982, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40128>.
- Deng:2008:FEM**
- [Den08] Weihua Deng. Finite element method for the space and time fractional Fokker–Planck equation. *SIAM Journal on Numerical Analysis*, 47(1):204–226, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [Dep08] **Deparis:2008:RBE**  
 Simone Deparis. Reduced basis error bound computation of parameter-dependent Navier–Stokes equations by the natural norm approach. *SIAM Journal on Numerical Analysis*, 46(4):2039–2067, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DER07] **Diening:2007:OCI**  
 Lars Diening, Carsten Ebmeyer, and Michael Růžička. Optimal convergence for the implicit space–time discretization of parabolic systems with  $p$ -structure. *SIAM Journal on Numerical Analysis*, 45(2):457–472, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Des04] **Despres:2004:EPE**  
 Bruno Després. An explicit A priori estimate for a finite volume approximation of linear advection on non-Cartesian grids. *SIAM Journal on Numerical Analysis*, 42(2):484–504, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39455>.
- [Des09] **Despres:2009:UAS**  
 Bruno Després. Uniform asymptotic stability of Strang’s explicit compact schemes for linear advection. *SIAM Journal on Numerical Analysis*, 47(5):3956–3976, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Deu07] **Deuring:2007:FEM**  
 Paul Deuring. A finite element method for 3D exterior Oseen flows: Error estimates. *SIAM Journal on Numerical Analysis*, 45(4):1517–1543, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DF09] **Debussche:2009:MES**  
 Arnaud Debussche and Erwan Faou. Modified energy for split-step methods applied to the linear Schrödinger equation. *SIAM Journal on Numerical Analysis*, 47(5):3705–3719, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [dFGAN08] **deFrutos:2008:PMF**  
 Javier de Frutos, Bosco García-Archilla, and Julia Novo. The postprocessed mixed finite-element method for the Navier–Stokes equations: Refined error bounds. *SIAM Journal on Numerical Analysis*, 46(1):201–230, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [dFGAN09] **deFrutos:2009:PFE**  
 Javier de Frutos, Bosco García-Archilla, and Julia Novo. Post-processing finite-element meth-



- ods for the Navier–Stokes equations: The fully discrete case. *SIAM Journal on Numerical Analysis*, 47(1):596–621, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37543>. [DG00]
- Deng:2000:NDB**
- [DFK00] Jian Song Deng, Yu Yu Feng, and Jernej Kozak. A note on the dimension of the bivariate spline space over the Morgan–Scott triangulation. *SIAM Journal on Numerical Analysis*, 37(3):1021–1028, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34777>.
- deFrutos:2000:SEM**
- [dFN00] Javier de Frutos and Julia Novo. A spectral element method for the Navier–Stokes equations with improved accuracy. *SIAM Journal on Numerical Analysis*, 38(3):799–819, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35198>.
- deFrutos:2002:PLF**
- [dFN02] Javier de Frutos and Julia Novo. Postprocessing the linear finite element method. *SIAM Journal on Numerical Analysis*, 40(3):805–819, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34308>. [DGH02]
- Donovan:2002:SOB**
- George C. Donovan, Jeffrey S. Geronimo, and Douglas P. Hardin. Squeezable orthogonal bases: Accuracy and smoothness. *SIAM Journal on Numerical Analysis*, 40(3):1077–1099, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38086>.
- Droniou:2003:FVS**
- [DGH03] Jérôme Droniou, Thierry Gallouët, and Raphaële Herbin. A finite volume scheme for a noncoercive elliptic equation with measure data. *SIAM Journal on Numerical Analysis*, 41(6):1997–2031, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37543>.

- Du:2003:CFS**
- [DGHL04] //epubs.siam.org/sam-bin/dbq/article/40520. **Du:2004:SFE**  
 Q. Du, M. D. Gunzburger, L. S. Hou, and J. Lee. Semidiscrete finite element approximations of a linear fluid-structure interaction problem. *SIAM Journal on Numerical Analysis*, 42(1):1–29, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40865>.
- [DGS03] **Doedel:2003:CPS**  
 E. J. Doedel, W. Govaerts, and Yu. A. Kuznetsov. Computation of periodic solution bifurcations in ODEs using bordered systems. *SIAM Journal on Numerical Analysis*, 41(2):401–435, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40077>.
- [DGS08] **Demkowicz:2008:PEO**  
 Leszek Demkowicz, Jayadeep Gopalakrishnan, and Joachim Schöberl. Polynomial extension operators. Part I. *SIAM Journal on Numerical Analysis*, 46(6):3006–3031, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DGS09] **Demkowicz:2009:PEO**  
 Leszek Demkowicz, Jayadeep Gopalakrishnan, and Joachim Schöberl. Polynomial extension operators. Part II. *SIAM Journal on Numerical Analysis*, 47(5):3293–3324, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DGS01] **Du:2001:FSA**  
 Qiang Du, Benyu Guo, and Jie Shen. Fourier spectral approximation to a dissipative system modeling the flow of liquid crystals. *SIAM Journal on Numerical Analysis*, 39(3):735–762, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37373>.
- [DH07] **Deckelnick:2007:CFE**  
 Klaus Deckelnick and Michael Hinze. Convergence of a finite element approximation to

- a state-constrained elliptic control problem. *SIAM Journal on Numerical Analysis*, 45(5):1937–1953, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DHHN<sup>+</sup>03] Ricardo G. Durán, Erwin Hernández, Luis Hervella-Nieto, Elsa Liberman, and Rodolfo Rodríguez. Error estimates for low-order isoparametric quadrilateral finite elements for plates. *SIAM Journal on Numerical Analysis*, 41(5):1751–1772, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40941>.
- [DHC07] Josef Dick. Explicit constructions of quasi-Monte Carlo rules for the numerical integration of high-dimensional periodic functions. *SIAM Journal on Numerical Analysis*, 45(5):2141–2176, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DHC08] Josef Dick. Walsh spaces containing smooth functions and quasi-Monte Carlo rules of arbitrary high order. *SIAM Journal on Numerical Analysis*, 46(3):1519–1553, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DHC05] Pierre Degond and Shi Jin. A smooth transition model between kinetic and diffusion equations. *SIAM Journal on Numerical Analysis*, 42(6):2671–2687, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43041>.
- [DHC00] A. L. Dontchev, William W. Hager, and Vladimir M. Veliov. Second-order Runge–Kutta approximations in control constrained optimal control. *SIAM Journal on Numerical Analysis*, 38(1):202–226, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35176>.
- [DHC05a] Qiang Du and Lili Ju. Finite volume methods on spheres and spherical centroidal Voronoi meshes. *SIAM Journal on Numerical Analysis*, 43(4):1673–1692, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42541>.

- [DJLT09] **Duan:2009:LPF** Huo-Yuan Duan, Feng Jia, Ping Lin, and Roger C. E. Tan. The local  $L^2$  projected  $C^0$  finite element method for Maxwell problem. *SIAM Journal on Numerical Analysis*, 47(2):1274–1303, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DK00] **Dibos:2000:GTV** Françoise Dibos and Georges Koepfler. Global total variation minimization. *SIAM Journal on Numerical Analysis*, 37(2):646–664, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33483>.
- [DK99a] **Dawson:1999:SPE** Clint Dawson and Robert Kirby. Solution of parabolic equations by backward Euler-mixed finite element methods on a dynamically changing mesh. *SIAM Journal on Numerical Analysis*, 37(2):423–442, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34286>.
- [DK08a] **Debrabant:2008:BSA** Kristian Debrabant and Anne Kværnø. B-series analysis of stochastic Runge–Kutta methods that use an iterative scheme to compute their internal stage values. *SIAM Journal on Numerical Analysis*, 47(1):181–203, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DK99b] **Druskin:1999:GSR** Vladimir Druskin and Leonid Knizhnerman. Gaussian spectral rules for the three-point second differences: I. A two-point positive definite problem in a semi-infinite domain. *SIAM Journal on Numerical Analysis*, 37(2):403–422, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33079>.
- [DK08b] **Diening:2008:LCA** Lars Diening and Christian Kreuzer. Linear convergence of an adaptive finite element method for the  $p$ -Laplacian equation. *SIAM Journal on Numerical Analysis*, 46(2):614–638, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DKIK07] **Dickson:2007:CEP** K. I. Dickson, C. T. Kelley, I. C. F. Ipsen, and I. G. Kevrekidis. Condition estimates for pseudo-arclength continuation. *SIAM Journal on Numerical Analysis*, 45(1):263–276, 2007. CODEN

- SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DL03]
- [DKS02] Wolfgang Dahmen, Angela Kunoth, and Reinhold Schneider. Wavelet least squares methods for boundary value problems. *SIAM Journal on Numerical Analysis*, 39(6):1985–2013, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36185>.
- [DKW08] Clark R. Dohrmann, Axel Klawonn, and Olof B. Widlund. Domain decomposition for less regular subdomains: Overlapping Schwarz in two dimensions. *SIAM Journal on Numerical Analysis*, 46(4):2153–2168, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DL02] Todd F. Dupont and Yingjie Liu. Symmetric error estimates for moving mesh Galerkin methods for advection-diffusion equations. *SIAM Journal on Numerical Analysis*, 40(3):914–927, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38043>. [DL08a]
- [Duan:2003:VPV] Huo-Yuan Duan and Guo-Ping Liang. On the velocity-pressure-vorticity least-squares mixed finite element method for the 3D Stokes equations. *SIAM Journal on Numerical Analysis*, 41(6):2114–2130, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39960>.
- [Dekel:2005:AMA] S. Dekel and D. Leviatan. Adaptive multivariate approximation using binary space partitions and geometric wavelets. *SIAM Journal on Numerical Analysis*, 43(2):707–732, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60464>.
- [Dohrmann:2006:PBP] C. R. Dohrmann and R. B. Lehoucq. A primal-based penalty preconditioner for elliptic saddle point systems. *SIAM Journal on Numerical Analysis*, 44(1):270–282, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Dai:2008:LRN] Zhewei Dai and Patricia K. Lamm. Local regularization for the nonlinear inverse autocon-

- olution problem. *SIAM Journal on Numerical Analysis*, 46(2):832–868, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DLM07]
- Duran:2008:EER**
- [DL08b] Ricardo G. Durán and Ariel L. Lombardi. Error estimates for the Raviart–Thomas interpolation under the maximum angle condition. *SIAM Journal on Numerical Analysis*, 46(3):1442–1453, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DLM09]
- Dieci:2009:SMF**
- [DL09a] Luca Dieci and Luciano Lopez. Sliding motion in Filippov differential systems: Theoretical results and a computational approach. *SIAM Journal on Numerical Analysis*, 47(3):2023–2051, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DLP05]
- Dobson:2009:OOE**
- [DL09b] Matthew Dobson and Mitchell Luskin. An optimal order error analysis of the one-dimensional quasicontinuum approximation. *SIAM Journal on Numerical Analysis*, 47(4):2455–2475, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DLST07]
- Day:2007:VCE**
- Sarah Day, Jean-Philippe Lessard, and Konstantin Mischaikow. Validated continuation for equilibria of PDEs. *SIAM Journal on Numerical Analysis*, 45(4):1398–1424, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Demlow:2009:PEE**
- Alan Demlow, Omar Lakkis, and Charalambos Makridakis. A posteriori error estimates in the maximum norm for parabolic problems. *SIAM Journal on Numerical Analysis*, 47(3):2157–2176, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Dick:2005:CAD**
- Josef Dick, Gunther Leobacher, and Friedrich Pillichshammer. Construction algorithms for digital nets with low weighted star discrepancy. *SIAM Journal on Numerical Analysis*, 43(1):76–95, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60466>.
- Duan:2007:LSF**
- Huo-Yuan Duan, Ping Lin, P. Saikrishnan, and Roger C. E. Tan. A least-squares finite element method for the mag-

- netostatic problem in a multiply connected Lipschitz domain. *SIAM Journal on Numerical Analysis*, 45(6):2537–2563, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [DMC00]
- Degond:2008:AAP**
- [DLV08] Pierre Degond, Jian-Guo Liu, and Marie-Hélène Vignal. Analysis of an asymptotic preserving scheme for the Euler–Poisson system in the quasineutral limit. *SIAM Journal on Numerical Analysis*, 46(3):1298–1322, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- DeBonis:2006:PMC**
- [DM06] M. C. De Bonis and G. Mastroianni. Projection methods and condition numbers in uniform norm for Fredholm and Cauchy singular integral equations. *SIAM Journal on Numerical Analysis*, 44(4):1351–1374, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Drblikova:2008:CAF**
- [DM08] Olga Drbliková and Karol Mikula. Convergence analysis of finite volume scheme for nonlinear tensor anisotropic diffusion in image processing. *SIAM Journal on Numerical Analysis*, 46(1):37–60, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Dos04]
- Dawson:2000:FEA**
- Clint N. Dawson and Mónica L. Martínez-Canales. Finite element approximations to the system of shallow water equations, Part III: On the treatment of boundary conditions. *SIAM Journal on Numerical Analysis*, 38(1):149–159, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34162>.
- Dedner:2007:ECC**
- [DMO07] Andreas Dedner, Charalambos Makridakis, and Mario Ohlberger. Error control for a class of Runge–Kutta discontinuous Galerkin methods for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 45(2):514–538, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Du:2001:EPA**
- [DMW01] Q. Du, M. Mu, and Z. N. Wu. Efficient parallel algorithms for parabolic problems. *SIAM Journal on Numerical Analysis*, 39(5):1469–1487, October 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38171>.
- Dosiyev:2004:HAB**
- A. A. Dosiyev. The high accurate block-grid method for solv-

- ing Laplace's boundary value problem with singularities. *SIAM Journal on Numerical Analysis*, 42(1):153–178, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38271>.
- [DPR06] **Dostál:2005:ISA**  
Z. Dostál. Inexact semimonotonic augmented Lagrangians with optimal feasibility convergence for convex bound and equality constrained quadratic programming. *SIAM Journal on Numerical Analysis*, 43(1):96–115, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43639>.
- [DP00] **Davini:2000:UMM**  
Cesare Davini, and Iginio Pitacco. An unconstrained mixed method for the biharmonic problem. *SIAM Journal on Numerical Analysis*, 38(3):820–836, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35977>.
- [dP07] **delaCalleYsern:2007:USP**  
B. de la Calle Ysern and F. Peherstorfer. Ultraspherical Stieltjes polynomials and Gauss–Kronrod quadrature behave nicely for  $\lambda < 0$ . *SIAM Journal on Numerical Analysis*, 45(2):770–786, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Diening:2006:SIE**  
Lars Diening, Andreas Prohl, and Michael Růžička. Semi-implicit Euler scheme for generalized Newtonian fluids. *SIAM Journal on Numerical Analysis*, 44(3):1172–1190, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DPvDC08] **Devigne:2008:NSP**  
V. M. Devigne, I. S. Pop, C. J. van Duijn, and T. Clopeau. A numerical scheme for the pore-scale simulation of crystal dissolution and precipitation in porous media. *SIAM Journal on Numerical Analysis*, 46(2):895–919, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DQV07] **Discacciati:2007:RRD**  
Marco Discacciati, Alfio Quarteroni, and Alberto Valli. Robin–Robin domain decomposition methods for the Stokes–Darcy coupling. *SIAM Journal on Numerical Analysis*, 45(3):1246–1268, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).



- Day:2005:RPE**
- [DR05] David Day and Louis Romero. Roots of polynomials expressed in terms of orthogonal polynomials. *SIAM Journal on Numerical Analysis*, 43(5):1969–1987, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60984>.
- Dashti:2008:PCN**
- [DR08] Masoumeh Dashti and James C. Robinson. An A posteriori condition on the numerical approximations of the Navier–Stokes equations for the existence of a strong solution. *SIAM Journal on Numerical Analysis*, 46(6):3136–3150, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Dahmen:1999:EEC**
- [DS99] Wolfgang Dahmen and Rob Stevenson. Element-by-element construction of wavelets satisfying stability and moment conditions. *SIAM Journal on Numerical Analysis*, 37(1):319–352, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33094>.
- Davydov:2002:SAI**
- [DS02] Oleg Davydov and Larry L. Schumaker. Stable approximation and interpolation with  $C^1$  quartic bivariate splines. *SIAM Journal on Numerical Analysis*, 39(5):1732–1748, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38447>.
- Danisch:2007:FOS**
- [DS07] Garvin Danisch and Gerhard Starke. First-order system least-squares for Darcy–Stokes flow. *SIAM Journal on Numerical Analysis*, 45(2):731–745, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Dong:2009:ALD**
- [DS09] Bo Dong and Chi-Wang Shu. Analysis of a local discontinuous Galerkin method for linear time-dependent fourth-order problems. *SIAM Journal on Numerical Analysis*, 47(5):3240–3268, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Du:2000:CAN**
- [Du00] Qiang Du. Convergence analysis of a numerical method for a mean field model of superconducting vortices. *SIAM Journal on Numerical Analysis*, 37(3):911–926, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38447>.

- [//epubs.siam.org/sam-bin/dbq/article/34551](http://epubs.siam.org/sam-bin/dbq/article/34551).
- Du:2001:OBN**
- [Du01] Qiang Du. Optimization based nonoverlapping domain decomposition algorithms and their convergence. *SIAM Journal on Numerical Analysis*, 39(3):1056–1077, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38027>.
- Du:2008:FDA**
- [Du08] Nailin Du. Finite-dimensional approximation settings for infinite-dimensional Moore–Penrose inverses. *SIAM Journal on Numerical Analysis*, 46(3):1454–1482, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Dieci:2002:LSI**
- [DV02] Luca Dieci and Erik S. Van Vleck. Lyapunov spectral intervals: Theory and computation. *SIAM Journal on Numerical Analysis*, 40(2):516–542, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39230>.
- daVeiga:2004:FEM**
- [dV04] L. Beirao da Veiga. Finite element methods for a modified Reissner–Mindlin free plate model. *SIAM Journal on Numerical Analysis*, 42(4):1572–1591, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43181>.
- Dobrowolski:2005:SMF**
- [DV05] Manfred Dobrowolski and Manuel Villegas. A stabilized mixed finite element method for elliptic systems of first order. *SIAM Journal on Numerical Analysis*, 43(3):949–969, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40882>.
- Dieci:2008:EQI**
- [DV08] Luca Dieci and Erik S. Van Vleck. On the error in QR integration. *SIAM Journal on Numerical Analysis*, 46(3):1166–1189, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- daVeiga:2007:FFE**
- [dVNS07] L. Beirão da Veiga, J. Niiranen, and R. Stenberg. A family of  $C^0$  finite elements for Kirchhoff plates I: Error analysis. *SIAM Journal on Numerical Analysis*, 45(5):2047–2071, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [DW09] **Dohrmann:2009:OSA**  
 Clark R. Dohrmann and Olof B. Widlund. An overlapping Schwarz algorithm for almost incompressible elasticity. *SIAM Journal on Numerical Analysis*, 47(4):2897–2923, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DWZ09] **Du:2009:MGS**  
 Qiang Du, Desheng Wang, and Liyong Zhu. On mesh geometry and stiffness matrix conditioning for general finite element spaces. *SIAM Journal on Numerical Analysis*, 47(2):1421–1444, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DZ02] **Du:2002:NAS**  
 Qiang Du and Tianyu Zhang. Numerical approximation of some linear stochastic partial differential equations driven by special additive noises. *SIAM Journal on Numerical Analysis*, 40(4):1421–1445, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38795>.
- [DZ08] **Dai:2008:TSF**  
 Xiaoying Dai and Aihui Zhou. Three-scale finite element discretizations for quantum eigenvalue problems. *SIAM Journal on Numerical Analysis*, 46(1):295–324, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [DZ09] **D’Angelo:2009:FEM**  
 Carlo D’Angelo and Paolo Zunino. A finite element method based on weighted interior penalties for heterogeneous incompressible flows. *SIAM Journal on Numerical Analysis*, 47(5):3990–4020, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [EB08] **Ethier:2008:SIT**  
 Marc Ethier and Yves Bourgault. Semi-implicit time-discretization schemes for the bidomain model. *SIAM Journal on Numerical Analysis*, 46(5):2443–2468, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [EE06] **Eiermann:2006:RKS**  
 Michael Eiermann and Oliver G. Ernst. A restarted Krylov subspace method for the evaluation of matrix functions. *SIAM Journal on Numerical Analysis*, 44(6):2481–2504, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [EF01] **Engo:2001:NIL**  
 Kenth Engø and Stig Faltinsen. Numerical integration of Lie-Poisson systems while preserv-

- ing coadjoint orbits and energy. *SIAM Journal on Numerical Analysis*, 39(1):128–145, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36421>.
- [EG03] **Eymard:2003:HCN**  
Robert Eymard and Thierry Gallouët. H-convergence and numerical schemes for elliptic problems. *SIAM Journal on Numerical Analysis*, 41(2):539–562, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39708>.
- [EG06a] **Ern:2006:DGMA**  
A. Ern and J. L. Guermond. Discontinuous Galerkin methods for Friedrichs’ systems. I. General theory. *SIAM Journal on Numerical Analysis*, 44(2):753–778, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [EG06b] **Ern:2006:DGMB**  
Alexandre Ern and Jean-Luc Guermond. Discontinuous Galerkin methods for Friedrichs’ systems. Part II. Second-order elliptic PDEs. *SIAM Journal on Numerical Analysis*, 44(6):2363–2388, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [EG08] **Ern:2008:DGGM**  
Alexandre Ern and Jean-Luc Guermond. Discontinuous Galerkin methods for Friedrichs’ systems. Part III. Multifield theories with partial coercivity. *SIAM Journal on Numerical Analysis*, 46(2):776–804, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Egg06] **Egger:2006:SIR**  
Herbert Egger. Semi-iterative regularization in Hilbert scales. *SIAM Journal on Numerical Analysis*, 44(1):66–81, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Egg08] **Egger:2008:SR**  
Herbert Egger.  $\mathcal{Y}$ -scale regularization. *SIAM Journal on Numerical Analysis*, 46(1):419–436, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [EGGM05] **Eymard:2005:CNS**  
R. Eymard, T. Gallouët, V. Gervais, and R. Masson. Convergence of a numerical scheme for stratigraphic modeling. *SIAM Journal on Numerical Analysis*, 43(2):474–501, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36421>.

[//epubs.siam.org/sam-bin/dbq/article/42620](http://epubs.siam.org/sam-bin/dbq/article/42620).

**Estep:2008:PPA**

- [EGR<sup>+</sup>08] D. Estep, V. Ginting, D. Ropp, J. N. Shadid, and S. Tavener. An A posteriori–A priori analysis of multiscale operator splitting. *SIAM Journal on Numerical Analysis*, 46(3):1116–1146, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Eymard:2007:CAC**

- [EHL07] R. Eymard, R. Herbin, and J. C. Latché. Convergence analysis of a colocated finite volume scheme for the incompressible Navier–Stokes equations on general 2D or 3D meshes. *SIAM Journal on Numerical Analysis*, 45(1):1–36, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Ervin:2007:NAT**

- [EHR07] Vincent J. Ervin, Norbert Heuer, and John Paul Roop. Numerical approximation of a time dependent, nonlinear, space-fractional diffusion equation. *SIAM Journal on Numerical Analysis*, 45(2):572–591, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Efendiev:2000:CNM**

- [EHW00] Yalchin R. Efendiev, Thomas Y. Hou, and Xiao-Hui Wu. Convergence of a nonconforming mul-

tiscale finite element method. *SIAM Journal on Numerical Analysis*, 37(3):888–910, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33032>.

**Emelianenko:2008:NWG**

- [EJR08] Maria Emelianenko, Lili Ju, and Alexander Rand. Nondegeneracy and weak global convergence of the Lloyd algorithm in  $\mathbf{R}^d$ . *SIAM Journal on Numerical Analysis*, 46(3):1423–1441, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Ervin:2009:CGN**

- [EJS09] V. J. Ervin, E. W. Jenkins, and S. Sun. Coupled generalized nonlinear Stokes flow with flow through a porous medium. *SIAM Journal on Numerical Analysis*, 47(2):929–952, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Evje:2000:MDA**

- [EK00] Steinar Evje and Kenneth Hvi- tendahl Karlsen. Monotone difference approximations of BV solutions to degenerate convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 37(6):1838–1860, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33032>.

- [//epubs.siam.org/sam-bin/dbq/article/33613](http://epubs.siam.org/sam-bin/dbq/article/33613). [EL08]
- Epshteyn:2009:NIP**
- [EK09] Yekaterina Epshteyn and Alexander Kurganov. New interior penalty discontinuous Galerkin methods for the Keller–Segel chemotaxis model. *SIAM Journal on Numerical Analysis*, 47(1):386–408, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Elliott:2004:FEA**
- [EKS04] C. M. Elliott, D. Kay, and V. Styles. A finite element approximation of a variational inequality formulation of Bean’s model for superconductivity. *SIAM Journal on Numerical Analysis*, 42(3):1324–1341, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41232>. [ELL02]
- Ervin:2007:NAQ**
- [EL07] Vincent J. Ervin and Hyesuk Lee. Numerical approximation of a quasi-Newtonian Stokes flow problem with defective boundary conditions. *SIAM Journal on Numerical Analysis*, 45(5):2120–2140, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [ELM00]
- Ebmeyer:2008:FEA**
- Carsten Ebmeyer and W. B. Liu. Finite element approximation of the fast diffusion and the porous medium equations. *SIAM Journal on Numerical Analysis*, 46(5):2393–2410, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Embree:2009:DSN**
- [EL09] Mark Embree and Richard B. Lehoucq. Dynamical systems and non-Hermitian iterative eigensolvers. *SIAM Journal on Numerical Analysis*, 47(2):1445–1473, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ewing:2002:AFV**
- [ELL02] Richard E. Ewing, Tao Lin, and Yanping Lin. On the accuracy of the finite volume element method based on piecewise linear polynomials. *SIAM Journal on Numerical Analysis*, 39(6):1865–1888, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36887>.
- Ervin:2000:ADC**
- [ELM00] V. J. Ervin, W. J. Layton, and J. M. Maubach. Adaptive defect-correction methods for viscous incompressible flow problems. *SIAM*

- Journal on Numerical Analysis*, 37(4):1165–1185, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31816>.
- [ELS<sup>+</sup>02] Richard E. Ewing, Yanping Lin., Tong Sun., Junping Wang., and Shuhua Zhang. Sharp  $L^2$ -error estimates and superconvergence of mixed finite element methods for non-Fickian flows in porous media. *SIAM Journal on Numerical Analysis*, 40(4):1538–1560, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37840>.
- [ELW02] Richard E. Ewing, Mingjun Liu, and Junping Wang. A new superconvergence for mixed finite element approximations. *SIAM Journal on Numerical Analysis*, 40(6):2133–2150, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39114>.
- [EM03] Vincent J. Ervin and William W. Miles. Approximation of time-dependent viscoelastic fluid flow: SUPG approximation. *SIAM Journal on Numerical Analysis*, 41(2):457–486, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41177>.
- [EP08] Christoph Erath and Dirk Praetorius. A posteriori error estimate and adaptive mesh refinement for the cell-centered finite volume method for elliptic boundary value problems. *SIAM Journal on Numerical Analysis*, 47(1):109–135, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ER02a] Howard C. Elman and Alison Ramage. An analysis of smoothing effects of upwinding strategies for the convection-diffusion equation. *SIAM Journal on Numerical Analysis*, 40(1):254–281, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37487>.
- [ER02b] K. Engelborghs and D. Roose. On stability of LMS methods and characteristic roots of delay differential equations. *SIAM Journal on Numerical Analysis*, 40(2):629–650, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-

- 7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37472>.
- Esedoglu:2006:SPP**
- [Ese06] Selim Esedoglu. Stability properties of the Perona–Malik scheme. *SIAM Journal on Numerical Analysis*, 44(3):1297–1313, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ewald:2005:NAS**
- [ET05] Brian D. Ewald and Roger Témam. Numerical analysis of stochastic schemes in geophysics. *SIAM Journal on Numerical Analysis*, 42(6):2257–2276, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41833>.
- Engelberg:2008:RES**
- [ET08] Shlomo Engelberg and Eitan Tadmor. Recovery of edges from spectral data with noise—A new perspective. *SIAM Journal on Numerical Analysis*, 46(5):2620–2635, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Estep:2008:PAI**
- [ETW08] D. Estep, S. Tavener, and T. Wildey. A posteriori analysis and improved accuracy for an operator decomposition solution of a conjugate heat transfer problem. *SIAM Journal on Numerical Analysis*, 46(4):2068–2089, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- E:2000:NML**
- [EW00] Weinan E and Xiao-Ping Wang. Numerical methods for the Landau–Lifshitz equation. *SIAM Journal on Numerical Analysis*, 38(5):1647–1665, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35219>.
- Fu:2009:MTR**
- [FDFD09] Chu-Li Fu, Zhi-Liang Deng, Xiao-Li Feng, and Fang-Fang Dou. A modified Tikhonov regularization for stable analytic continuation. *SIAM Journal on Numerical Analysis*, 47(4):2982–3000, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Feng:2000:AFE**
- [Fen00] Xiaobing Feng. Analysis of finite element methods and domain decomposition algorithms for a fluid-solid interaction problem. *SIAM Journal on Numerical Analysis*, 38(4):1312–1336, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35219>.



- [//epubs.siam.org/sam-bin/dbq/article/36152](http://epubs.siam.org/sam-bin/dbq/article/36152).
- [Fen06] Xiaobing Feng. Fully discrete finite element approximations of the Navier–Stokes–Cahn–Hilliard diffuse interface model for two-phase fluid flows. *SIAM Journal on Numerical Analysis*, 44(3):1049–1072, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Fen06] **Feng:2006:FDF**
- [Fer03] Roberto Ferretti. Convergence of semi-Lagrangian approximations to convex Hamilton–Jacobi equations under (very) large courant numbers. *SIAM Journal on Numerical Analysis*, 40(6):2240–2253, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38837>.
- [Fer03] **Ferretti:2003:CSL**
- [FG99] Bengt Fornberg and Michelle Ghrist. Spatial finite difference approximations for wave-type equations. *SIAM Journal on Numerical Analysis*, 37(1):105–130, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33588>.
- [FG99] **Fornberg:1999:SFD**
- [FGNQ02] L. Formaggia, J.-F. Gerbeau, F. Nobile, and A. Quarteroni. Numerical treatment of defective boundary conditions for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 40(1):376–401, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38296>.
- [FGNQ02] **Formaggia:2002:NTD**
- [FGS07] Florian Frühauf, Bastian Gebauer, and Otmar Scherzer. Detecting interfaces in a parabolic-elliptic problem from surface measurements. *SIAM Journal on Numerical Analysis*, 45(2):810–836, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [FGS07] **Fruhauf:2007:DIP**
- [Fil01] Francis Filbet. Convergence of a finite volume scheme for the Vlasov–Poisson system. *SIAM Journal on Numerical Analysis*, 39(4):1146–1169, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37321>.
- [Fil01] **Filbet:2001:CFV**
- [FJMT07] Leopoldo P. Franca, Volker John, Gunar Matthies, and Lutz Tobiska. An inf-sup stable and residual-free bubble
- [FJMT07] **Franca:2007:ISS**

- element for the Oseen equations. *SIAM Journal on Numerical Analysis*, 45(6):2392–2407, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [FK01] **Feng:2001:TLA** Xiaobing Feng and Ohannes A. Karakashian. Two-level additive Schwarz methods for a discontinuous Galerkin approximation of second order elliptic problems. *SIAM Journal on Numerical Analysis*, 39(4):1343–1365, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37848>.
- [FK05] **Fowler:2005:PTC** K. R. Fowler and C. T. Kelley. Pseudo-transient continuation for nonsmooth nonlinear equations. *SIAM Journal on Numerical Analysis*, 43(4):1385–1406, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43129>.
- [FL03] **Filbet:2003:NAL** Francis Filbet and Philippe Laurençot. Numerical approximation of the Lifshitz–Slyozov–Wagner equation. *SIAM Journal on Numerical Analysis*, 41(2):563–588, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [FL05] **Frommer:2005:ETS** Andreas Frommer and Bruno Lang. Existence tests for solutions of nonlinear equations using Borsuk’s theorem. *SIAM Journal on Numerical Analysis*, 43(3):1348–1361, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43814>.
- [FLL<sup>+</sup>06] **Fairweather:2006:AER** Graeme Fairweather, Qun Lin, Yanping Lin, Junping Wang, and Shuhua Zhang. Asymptotic expansions and Richardson extrapolation of approximate solutions for second order elliptic problems on rectangular domains by mixed finite element methods. *SIAM Journal on Numerical Analysis*, 44(3):1122–1149, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [FLT08] **Faber:2008:FMT** V. Faber, J. Liesen, and P. Tichý. The Faber–Manteuffel theorem for linear operators. *SIAM Journal on Numerical Analysis*, 46(3):1323–1337, ??? 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- Feng:2009:MFE**
- [FN09a] Xiaobing Feng and Michael Neilan. Mixed finite element methods for the fully nonlinear Monge–Ampère equation based on the vanishing moment method. *SIAM Journal on Numerical Analysis*, 47(2):1226–1250, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Feng:2009:MCF**
- [FN09b] Xiaobing Feng and Michael Neilan. A modified characteristic finite element method for a fully nonlinear formulation of the semigeostrophic flow equations. *SIAM Journal on Numerical Analysis*, 47(4):2952–2981, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Forcadel:2008:EEN**
- [For08] N. Forcadel. An error estimate for a new scheme for mean curvature motion. *SIAM Journal on Numerical Analysis*, 46(5):2715–2741, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Forcadel:2009:CPG**
- [For09] Nicolas Forcadel. Comparison principle for a generalized fast marching method. *SIAM Journal on Numerical Analysis*, 47(3):1923–1951, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Floater:2000:LIS**
- [FQ00] Michael S. Floater and Ewald G. Quak. Linear independence and stability of piecewise linear prewavelets on arbitrary triangulations. *SIAM Journal on Numerical Analysis*, 38(1):58–79, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34262>.
- Fornasier:2008:RAV**
- [FR08] Massimo Fornasier and Holger Rauhut. Recovery algorithms for vector-valued data with joint sparsity constraints. *SIAM Journal on Numerical Analysis*, 46(2):577–613, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Frommer:2001:ACT**
- [FS01] Andreas Frommer and Daniel B. Szyld. An algebraic convergence theory for restricted additive Schwarz methods using weighted max norms. *SIAM Journal on Numerical Analysis*, 39(2):463–479, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37082>.

- Ferracina:2004:SRT**
- [FS04] L. Ferracina and M. N. Spijker. Stepsize restrictions for the total-variation-diminishing property in general Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 42(3):1073–1093, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41558>.
- Fornasier:2009:SCM**
- [FS09] Massimo Fornasier and Carola-Bibiane Schönlieb. Subspace correction methods for total variation and  $\ell_1$ -minimization. *SIAM Journal on Numerical Analysis*, 47(5):3397–3428, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Fruhauf:2005:ARM**
- [FSL05] F. Frühauf, O. Scherzer, and A. Leitão. Analysis of regularization methods for the solution of ill-posed problems involving discontinuous operators. *SIAM Journal on Numerical Analysis*, 43(2):767–786, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43090>.
- Fierro:2003:PEE**
- [FV03] Francesca Fierro and Andreas Veiser. A posteriori error estimators for regularized total variation of characteristic functions. *SIAM Journal on Numerical Analysis*, 41(6):2032–2055, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40828>.
- Falgout:2004:GAM**
- [FV04] Robert D. Falgout and Panayot S. Vassilevski. On generalizing the algebraic multigrid framework. *SIAM Journal on Numerical Analysis*, 42(4):1669–1693, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42974>.
- Formaggia:2008:NAN**
- [FVV08] Luca Formaggia, Alessandro Veneziani, and Christian Vergara. A new approach to numerical solution of defective boundary value problems in incompressible fluid dynamics. *SIAM Journal on Numerical Analysis*, 46(6):2769–2794, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Feng:2009:DGM**
- [FW09a] Xiaobing Feng and Haijun Wu. Discontinuous Galerkin methods for the Helmholtz equation with large wave number. *SIAM Journal on Numerical Analysis*, 47(4):2872–2896, 2009.

CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Fuselier:2009:SEE**

- [FW09b] Edward J. Fuselier and Grady B. Wright. Stability and error estimates for vector field interpolation and decomposition on the sphere with RBFs. *SIAM Journal on Numerical Analysis*, 47(5):3213–3239, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Ger08]

**Gander:2006:OSM**

- [Gan06] Martin J. Gander. Optimized Schwarz methods. *SIAM Journal on Numerical Analysis*, 44(2):699–731, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [GFD00]

**García-Archilla:2000:PGM**

- [GAT00] Bosco García-Archilla and Edriss S. Titi. Postprocessing the Galerkin method: The finite-element case. *SIAM Journal on Numerical Analysis*, 37(2):470–499, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33589>. [GG09]

**Geissert:2006:DML**

- [Gei06] Matthias Geissert. Discrete maximal  $L_p$  regularity for finite element operators. *SIAM Journal on Numerical Analysis*, 44

(2):677–698, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Gervasio:2008:CAH**

Paola Gervasio. Convergence analysis of high order algebraic fractional step schemes for time-dependent Stokes equations. *SIAM Journal on Numerical Analysis*, 46(4):1682–1703, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Ghrist:2000:STI**

Michelle Ghrist, Bengt Fornberg, and Tobin A. Driscoll. Staggered time integrators for wave equations. *SIAM Journal on Numerical Analysis*, 38(3):718–741, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35177>.

**Giani:2009:CAM**

S. Giani and I. G. Graham. A convergent adaptive method for elliptic eigenvalue problems. *SIAM Journal on Numerical Analysis*, 47(2):1067–1091, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Guillen-Gonzalez:2008:CSC**

F. Guillén-González and J. V. Gutiérrez-Santacreu. Conditional stability and conver-

- gence of a fully discrete scheme for three-dimensional Navier–Stokes equations with mass diffusion. *SIAM Journal on Numerical Analysis*, 46(5):2276–2308, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [GGHS08] I. G. Graham, L. Grasedyck, W. Hackbusch, and S. A. Sauter. Optimal panel-clustering in the presence of anisotropic mesh refinement. *SIAM Journal on Numerical Analysis*, 46(1):517–543, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [GH00] Gabriel N. Gatica and Norbert Heuer. A dual-dual formulation for the coupling of mixed-FEM and BEM in hyperelasticity. *SIAM Journal on Numerical Analysis*, 38(2):380–400, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36348>.
- [GH03] W. Guo and L. S. Hou. Generalizations and accelerations of Lions’ nonoverlapping domain decomposition method for linear elliptic PDE. *SIAM Journal on Numerical Analysis*, 41(6):2056–2080, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40715>.
- [GH05] **Grzhibovskis:2005:CTA**  
Richards Grzhibovskis and Alexei Heintz. A convolution-thresholding approximation of generalized curvature flows. *SIAM Journal on Numerical Analysis*, 42(6):2652–2670, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43131>.
- [GH07] **Gander:2007:OSW**  
M. J. Gander and L. Halpern. Optimized Schwarz waveform relaxation methods for advection reaction diffusion problems. *SIAM Journal on Numerical Analysis*, 45(2):666–697, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [GHN03] **Gander:2003:OSW**  
Martin J. Gander, Laurence Halpern, and Frédéric Nataf. Optimal Schwarz waveform relaxation for the one dimensional wave equation. *SIAM Journal on Numerical Analysis*, 41(5):1643–1681, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39559>.
- [Gua:2000:DDF] **Gatica:2000:DDF**
- [Guo:2003:GAL] **Guo:2003:GAL**

- [GHS03] **Gatica:2003:LSM** Gabriel N. Gatica, Helmut Harbrecht, and Reinhold Schneider. Least squares methods for the coupling of FEM and BEM. *SIAM Journal on Numerical Analysis*, 41(5):1974–1995, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40066>.
- [Gie05] **Giese:2005:NSA** Guido Giese. Nonlinear stability analysis for the method of transport for the elastic-plastic wave equation. *SIAM Journal on Numerical Analysis*, 42(6):2569–2589, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41788>.
- [GHV00] **Gallouet:2000:EEA** Thierry Gallouët, Raphaèle Herbin, and Marie H el ene Vignal. Error estimates on the approximate finite volume solution of convection diffusion equations with general boundary conditions. *SIAM Journal on Numerical Analysis*, 37(6):1935–1972, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35138>.
- [Gib04] **Gibaru:2004:TRS** Olivier Gibaru. Tensorial rational surfaces with base points via massic vectors. *SIAM Journal on Numerical Analysis*, 42(4):1415–1434, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42097>.
- [GK08] **Gaidashev:2008:NAS** Denis Gaidashev and Dmitry Khmelev. On numerical algorithms for the solution of a Beltrami equation. *SIAM Journal on Numerical Analysis*, 46(5):2238–2253, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [GK09a] **Graser:2009:NNM** Carsten Gr aser and Ralf Kornhuber. Nonsmooth Newton methods for set-valued saddle point problems. *SIAM Journal on Numerical Analysis*, 47(2):1251–1273, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [GK09b] **Gross:2009:CRT** Christian Gross and Rolf Krause. On the convergence of recursive trust-region methods for multiscale nonlinear optimization and applications to nonlinear mechanics. *SIAM*

*Journal on Numerical Analysis*, 47(4):3044–3069, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Groff:2003:LCP**

[GKK03]

Richard E. Groff, Pramod P. Khargonekar, and Daniel E. Koditschek. A local convergence proof for the minvar algorithm for computing continuous piecewise linear approximations. *SIAM Journal on Numerical Analysis*, 41(3):983–1007, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40221>.

**Govaerts:2000:NMG**

[GKS00]

W. Govaerts, Yu. A. Kuznetsov, and B. Sijnave. Numerical methods for the generalized Hopf bifurcation. *SIAM Journal on Numerical Analysis*, 38(1):329–346, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35255>.

**Gunzburger:2000:OBD**

[GL00]

Max D. Gunzburger and Hyesuk Kwon Lee. An optimization-based domain decomposition method for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 37(5):1455–1480, October 2000. CODEN SJNAAM.

ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33286>.

**Glimm:2003:CFT**

[GLL<sup>+</sup>03]

James Glimm, Xiaolin Li, Yingjie Liu, Zhiliang Xu, and Ning Zhao. Conservative front tracking with improved accuracy. *SIAM Journal on Numerical Analysis*, 41(5):1926–1947, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38862>.

**Gong:2008:IIF**

[GLL08]

Yan Gong, Bo Li, and Zhilin Li. Immersed-interface finite-element methods for elliptic interface problems with nonhomogeneous jump conditions. *SIAM Journal on Numerical Analysis*, 46(1):472–495, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Gu:2002:DDQ**

[GLQZ02]

Guang-Ze Gu, Dong-Hui Li, Liqun Qi, and Shu-Zi Zhou. Descent directions of quasi-Newton methods for symmetric nonlinear equations. *SIAM Journal on Numerical Analysis*, 40(5):1763–1774, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33286>.



- [//epubs.siam.org/sam-bin/dbq/article/39742](http://epubs.siam.org/sam-bin/dbq/article/39742).
- [GLY00] Christoph Gauger, Peter Leinen, and Harry Yserentant. The finite mass method. *SIAM Journal on Numerical Analysis*, 37(6):1768–1799, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35256>.
- [GM00a] Laurent Gosse and Charalambos Makridakis. Two A posteriori error estimates for one-dimensional scalar conservation laws. *SIAM Journal on Numerical Analysis*, 38(3):964–988, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35038>.
- [GM00b] M. D. Gunzburger and S. Manservigi. Analysis and approximation of the velocity tracking problem for Navier–Stokes flows with distributed control. *SIAM Journal on Numerical Analysis*, 37(5):1481–1512, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32941>.
- [GM01] Leon Greenberg and Marco Marletta. Numerical solution of non-self-adjoint Sturm–Liouville problems and related systems. *SIAM Journal on Numerical Analysis*, 38(6):1800–1845, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35874>.
- [GM05a] Samy Gallego and Florian Méhats. Entropic discretization of a quantum drift-diffusion model. *SIAM Journal on Numerical Analysis*, 43(5):1828–1849, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61055>.
- [GM05b] Emmanuel Gobet and Sylvain Maire. Sequential control variates for functionals of Markov processes. *SIAM Journal on Numerical Analysis*, 43(3):1256–1275, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60912>.
- [GM06a] M. Ganesh and H. N. Mhaskar. Matrix-free interpolation on the

- sphere. *SIAM Journal on Numerical Analysis*, 44(3):1314–1331, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Graham:2006:AMR**
- [GM06b] Ivan G. Graham and William McLean. Anisotropic mesh refinement: The conditioning of Galerkin boundary element matrices and simple preconditioners. *SIAM Journal on Numerical Analysis*, 44(4):1487–1513, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Getreuer:2008:EMS**
- [GM08] Pascal Getreuer and François G. Meyer. ENO multiresolution schemes with general discretizations. *SIAM Journal on Numerical Analysis*, 46(6):2953–2977, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gia:2009:LLP**
- [GM09] Q. T. Le Gia and H. N. Mhaskar. Localized linear polynomial operators and quadrature formulas on the sphere. *SIAM Journal on Numerical Analysis*, 47(1):440–466, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gatica:2007:ACP**
- [GMM07] Gabriel N. Gatica, Antonio Márquez, and Salim Meddahi. Analysis of the coupling of primal and dual-mixed finite element methods for a two-dimensional fluid-solid interaction problem. *SIAM Journal on Numerical Analysis*, 45(5):2072–2097, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gawronski:2007:RCE**
- [GMR07] W. Gawronski, J. Müller, and M. Reinhard. Reduced cancellation in the evaluation of entire functions and applications to the error function. *SIAM Journal on Numerical Analysis*, 45(6):2564–2576, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Guermond:2005:EAP**
- [GMS05] J. L. Guermond, P. Mineev, and J. Shen. Error analysis of pressure-correction schemes for the time-dependent Stokes equations with open boundary conditions. *SIAM Journal on Numerical Analysis*, 43(1):239–258, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60441>.
- Goudon:2002:ASV**
- [Gou02] Thierry Goudon. Analysis of a semidiscrete version of the Wigner equation. *SIAM Journal on Numerical Analysis*, 40(6):2007–2025, Decem-

- ber 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38836>. [GP09]
- Gobbert:1999:DFE**
- [GP99] Matthias K. Gobbert and Andreas Prohl. A discontinuous finite element method for solving a multiwell problem. *SIAM Journal on Numerical Analysis*, 37(1):246–268, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33379>. [GPD04]
- Gopalakrishnan:2000:MMF**
- [GP00] Jayadeep Gopalakrishnan and Joseph E. Pasciak. Multigrid for the mortar finite element method. *SIAM Journal on Numerical Analysis*, 37(3):1029–1052, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34104>. [GPHA07]
- Gudi:2007:DGM**
- [GP07] Thirupathi Gudi and Amiya K. Pani. Discontinuous Galerkin methods for quasi-linear elliptic problems of nonmonotone type. *SIAM Journal on Numerical Analysis*, 45(1):163–192, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Guermond:2009:ASH**
- Jean-Luc Guermond and Bojan Popov.  $L^1$ -approximation of stationary Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 47(1):339–362, ??? 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gopalakrishnan:2004:AMA**
- Jayadeep Gopalakrishnan, Joseph E. Pasciak, and Leszek F. Demkowicz. Analysis of a multigrid algorithm for time harmonic Maxwell equations. *SIAM Journal on Numerical Analysis*, 42(1):90–108, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39490>.
- Gonzalez-Pinto:2007:CCG**
- S. González-Pinto and D. Hernández-Abreu. On the contractivity and convergence of general linear methods on semi-infinite intervals. *SIAM Journal on Numerical Analysis*, 45(3):969–985, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gobet:2006:DSZ**
- [GPPP06] Emmanuel Gobet, Gilles Pagès, Huyèn Pham, and Jacques Printems. Discretization and simulation of the Zakai equation. *SIAM Journal on Numerical Analysis*, 44(6):2505–2538, January 2006. CODEN

- SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gross:2007:FED**
- [GR07] Sven Gross and Arnold Reusken. Finite element discretization error analysis of a surface tension force in two-phase incompressible flows. *SIAM Journal on Numerical Analysis*, 45(4):1679–1700, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Girault:2009:DAC**
- [GR09] Vivette Girault and Béatrice Rivière. DG approximation of coupled Navier–Stokes and Darcy equations by Beaver–Joseph–Saffman interface condition. *SIAM Journal on Numerical Analysis*, 47(3):2052–2089, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Gradinaru:2008:SST**
- [Gra08] V. Gradinaru. Strang splitting for the time-dependent schrödinger equation on sparse grids. *SIAM Journal on Numerical Analysis*, 46(1):103–123, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Greff:2007:NBS**
- [Gre07] Isabelle Greff. Nonconforming box-schemes for elliptic problems on rectangular grids. *SIAM Journal on Numerical Analysis*, 45(3):946–968, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Grohs:2008:SAS**
- [Gro08] Philipp Grohs. Smoothness analysis of subdivision schemes on regular grids by proximity. *SIAM Journal on Numerical Analysis*, 46(4):2169–2182, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Grune:2003:ARR**
- [Grü03] Lars Grüne. Attraction rates, robustness, and discretization of attractors. *SIAM Journal on Numerical Analysis*, 41(6):2096–2113, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39411>.
- Gasca:2000:BHI**
- [GS00] Mariano Gasca and Thomas Sauer. On bivariate Hermite interpolation with minimal degree polynomials. *SIAM Journal on Numerical Analysis*, 37(3):772–798, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33887>.
- Gil:2003:CZT**
- [GS03a] Amparo Gil and Javier Segura. Computing the zeros

- and Turning points of solutions of second order homogeneous linear ODEs. *SIAM Journal on Numerical Analysis*, 41(3):827–855, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39275>. [GS09]
- Guermond:2003:VCP**
- [GS03b] J. L. Guermond and Jie Shen. Velocity-correction projection methods for incompressible flows. *SIAM Journal on Numerical Analysis*, 41(1):112–134, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39540>.
- Guessab:2005:SEE**
- [GS05] Allal Guessab and Gerhard Schmeisser. Sharp error estimates for interpolatory approximation on convex polytopes. *SIAM Journal on Numerical Analysis*, 43(3):909–923, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43595>.
- Guo:2007:OCV**
- [GS07] Benqi Guo and Weiwei Sun. The optimal convergence of the  $h$ - $p$  version of the finite element method with quasi-uniform meshes. *SIAM Journal on Numerical Analysis*, 45(2):698–730, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Galvis:2009:AID**
- J. Galvis and M. Sarkis. Approximating infinity-dimensional stochastic Darcy’s equations without uniform ellipticity. *SIAM Journal on Numerical Analysis*, 47(5):3624–3651, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Grote:2006:DGF**
- [GSS06] Marcus J. Grote, Anna Schneebeli, and Dominik Schötzau. Discontinuous Galerkin finite element method for the wave equation. *SIAM Journal on Numerical Analysis*, 44(6):2408–2431, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Girault:2008:CDG**
- [GSWY08] Vivette Girault, Shuyu Sun, Mary F. Wheeler, and Ivan Yotov. Coupling discontinuous Galerkin and mixed finite element discretizations using mortar finite elements. *SIAM Journal on Numerical Analysis*, 46(2):949–979, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [GT00] **Gelb:2000:DES**  
 Anne Gelb and Eitan Tadmor. Detection of edges in spectral data II. nonlinear enhancement. *SIAM Journal on Numerical Analysis*, 38(4):1389–1408, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35915>.
- [GT03] **Gosse:2003:SLW**  
 Laurent Gosse and Giuseppe Toscani. Space localization and well-balanced schemes for discrete kinetic models in diffusive regimes. *SIAM Journal on Numerical Analysis*, 41(2):641–658, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39939>.
- [Gue04] **Guermond:2004:FET**  
 J. L. Guermond. A finite element technique for solving first-order PDEs in  $p$ . *SIAM Journal on Numerical Analysis*, 42(2):714–737, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41705>.
- [Gug01] **Guglielmi:2001:ASB**  
 Nicola Guglielmi. Asymptotic stability barriers for natural Runge–Kutta processes for delay equations. *SIAM Journal on Numerical Analysis*, 39(3):763–783, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37539>.
- [Gui03] **Guittet:2003:TCM**  
 K. Guittet. On the time-continuous mass transport problem and its approximation by augmented Lagrangian techniques. *SIAM Journal on Numerical Analysis*, 41(1):382–399, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38606>.
- [Guo06] **Guo:2006:ATP**  
 Benqi Guo. Approximation theory for the  $p$ -version of the finite element method in three dimensions. Part 1: Approximabilities of singular functions in the framework of the Jacobi-weighted Besov and Sobolev spaces. *SIAM Journal on Numerical Analysis*, 44(1):246–269, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Guo09] **Guo:2009:ATP**  
 Benqi Guo. Approximation theory for the  $P$ -version of the finite element method in three dimensions. Part II: Convergence of the  $P$  version of the finite

- element method. *SIAM Journal on Numerical Analysis*, 47(4):2578–2611, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Han06]
- [GW07] Peter Giesl and Holger Wendland. Meshless collocation: Error estimates with application to dynamical systems. *SIAM Journal on Numerical Analysis*, 45(4):1723–1741, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Han08]
- [GZ09] Benqi Guo and Jianming Zhang. Stable and compatible polynomial extensions in three dimensions and applications to the  $p$  and  $h$ - $p$  finite element method. *SIAM Journal on Numerical Analysis*, 47(2):1195–1225, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Har07]
- [Hac07] Benjamin Hackl. Methods for reliable topology changes for perimeter-regularized geometric inverse problems. *SIAM Journal on Numerical Analysis*, 45(5):2201–2227, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Hau02]
- [Hansen:2006:CMT] Eskil Hansen. Convergence of multistep time discretizations of nonlinear dissipative evolution equations. *SIAM Journal on Numerical Analysis*, 44(1):55–65, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Han:2008:CPP] Xuli Han. Convexity-preserving piecewise rational quartic interpolation. *SIAM Journal on Numerical Analysis*, 46(2):920–929, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Hartmann:2007:ACA] Ralf Hartmann. Adjoint consistency analysis of discontinuous Galerkin discretizations. *SIAM Journal on Numerical Analysis*, 45(6):2671–2696, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Hausenblas:2002:EAA] Erika Hausenblas. Error analysis for approximation of stochastic differential equations driven by Poisson random measures. *SIAM Journal on Numerical Analysis*, 40(1):87–113, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36027>.

- [Hau08] **Hausenblas:2008:FEA**  
Erika Hausenblas. Finite element approximation of stochastic partial differential equations driven by Poisson random measures of jump type. *SIAM Journal on Numerical Analysis*, 46(1):437–471, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HB00] **Han:2000:EEF**  
Houde Han and Weizhu Bao. Error estimates for the finite element approximation of problems in unbounded domains. *SIAM Journal on Numerical Analysis*, 37(4):1101–1119, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34180>.
- [HC09] **Huybrechs:2009:GGQ**  
Daan Huybrechs and Ronald Cools. On generalized Gaussian quadrature rules for singular and nearly singular integrals. *SIAM Journal on Numerical Analysis*, 47(1):719–739, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HDVV09] **Haelterman:2009:QNL**  
Rob Haelterman, Joris Degroote, Dirk Van Heule, and Jan Vierendeels. The quasi-Newton least squares method: A new and fast secant method analyzed for linear systems. *SIAM Journal on Numerical Analysis*, 47(3):2347–2368, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [He03] **He:2003:TLM**  
Yinnian He. Two-level method based on finite element and Crank–Nicolson extrapolation for the time-dependent Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 41(4):1263–1285, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38565>.
- [Hel09] **Helenbrook:2009:EEF**  
B. T. Helenbrook. On the existence of explicit *hp*-finite element methods using Gauss–Lobatto integration on the triangle. *SIAM Journal on Numerical Analysis*, 47(2):1304–1318, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Her03] **Herbin:2003:MMN**  
Raphaèle Herbin. A monotonic method for the numerical solution of some free boundary value problems. *SIAM Journal on Numerical Analysis*, 40(6):2292–2310, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38055>.



- [HH09] **Hintermuller:2009:MYR**  
 Michael Hintermüller and Michael Hinze. Moreau–Yosida regularization in state constrained elliptic control problems: Error estimates and parameter adjustment. *SIAM Journal on Numerical Analysis*, 47(3):1666–1683, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HHT08] **Hale:2008:CRM**  
 Nicholas Hale, Nicholas J. Higham, and Lloyd N. Trefethen. Computing  $A^\alpha$ ,  $\log(A)$ , and related matrix functions by contour integrals. *SIAM Journal on Numerical Analysis*, 46(5):2505–2523, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HhW02] **Han:2002:NFE**  
 Weimin Han and Lie heng Wang. Nonconforming finite element analysis for a plate contact problem. *SIAM Journal on Numerical Analysis*, 40(5):1683–1697, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39073>.
- [Hig99] **Higham:1999:TRA**  
 Desmond J. Higham. Trust region algorithms and timestep selection. *SIAM Journal on Numerical Analysis*, 37(1):194–210, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33597>.
- [Hig00] **Higham:2000:MSA**  
 Desmond J. Higham. Mean-square and asymptotic stability of the stochastic theta method. *SIAM Journal on Numerical Analysis*, 38(3):753–769, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34736>.
- [Hig05] **Higueras:2005:RRK**  
 Inmaculada Higueras. Representations of Runge–Kutta methods and strong stability preserving methods. *SIAM Journal on Numerical Analysis*, 43(3):924–948, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42706>.
- [Hig06] **Higueras:2006:SSA**  
 Inmaculada Higueras. Strong stability for additive Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 44(4):1735–1758, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [Hip02] **Hiptmair:2002:SCE**  
 R. Hiptmair. Symmetric coupling for eddy current problems. *SIAM Journal on Numerical Analysis*, 40(1):41–65, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38046>.
- [Hip03] **Hiptmair:2003:CFE**  
 R. Hiptmair. Coupling of finite elements and boundary elements in electromagnetic scattering. *SIAM Journal on Numerical Analysis*, 41(3):919–944, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39775>.
- [HJ03] **Hayes:2003:RSN**  
 Wayne B. Hayes and Kenneth R. Jackson. Rigorous shadowing of numerical solutions of ordinary differential equations by containment. *SIAM Journal on Numerical Analysis*, 41(5):1948–1973, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39910>.
- [HK01] **Hald:2001:COP**  
 Ole H. Hald and Raz Kupferman. Convergence of optimal prediction for nonlinear Hamiltonian systems. *SIAM Journal on Numerical Analysis*, 39(3):983–1000, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37448>.
- [HK07] **Holtz:2007:BSB**  
 Markus Holtz and Angela Kunoth. B-spline-based monotone multigrid methods. *SIAM Journal on Numerical Analysis*, 45(3):1175–1199, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HK09] **Hetmaniuk:2009:LAI**  
 U. Hetmaniuk and P. Knupp. Local anisotropic interpolation error estimates based on directional derivatives along edges. *SIAM Journal on Numerical Analysis*, 47(1):575–595, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HKW09] **Hoppe:2009:CAA**  
 R. H. W. Hoppe, G. Kanschat, and T. Warburton. Convergence analysis of an adaptive interior penalty discontinuous Galerkin method. *SIAM Journal on Numerical Analysis*, 47(1):534–550, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [HKY00] **Hu:2000:MAA**  
 Yingkang Hu, Kirill A. Kopotun., and Xiang Ming Yu. Modified adaptive algorithms. *SIAM Journal on Numerical Analysis*, 38(3):1013–1033, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35356>.
- [HL00] **Hairer:2000:LTE**  
 Ernst Hairer and Christian Lubich. Long-time energy conservation of numerical methods for oscillatory differential equations. *SIAM Journal on Numerical Analysis*, 38(2):414–441, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35359>.
- [HL02] **Hazard:2002:SFM**  
 Christophe Hazard and Stephanie Lohrengel. A singular field method for Maxwell’s equations: Numerical aspects for 2D magnetostatics. *SIAM Journal on Numerical Analysis*, 40(3):1021–1040, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37576>.
- [HL03a] **Hochbruck:2003:MIT**  
 Marlis Hochbruck and Christian Lubich. On Magnus integrators for time-dependent Schrödinger equations. *SIAM Journal on Numerical Analysis*, 41(3):945–963, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40387>.
- [HL03b] **Hou:2003:SEC**  
 Yanren Hou and Kaitai Li. A small eddy correction method for nonlinear dissipative evolutionary equations. *SIAM Journal on Numerical Analysis*, 41(3):1101–1130, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39637>.
- [HL09a] **Hild:2009:REE**  
 Patrick Hild and Vanessa Lleras. Residual error estimators for Coulomb friction. *SIAM Journal on Numerical Analysis*, 47(5):3550–3583, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HL09b] **Hou:2009:PFG**  
 Yanren Hou and Kaitai Li. Postprocessing Fourier Galerkin method for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 47(3):1909–1922, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [Hla01] **Hlavacek:2001:RSP**  
Ivan Hlaváček. Reliable solution of a perfect plastic problem with uncertain stress-strain law and yield function. *SIAM Journal on Numerical Analysis*, 39(5):1539–1555, October 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38006>.
- [HLP08] **Heinemeyer:2008:CNM**  
Eric Heinemeyer, Marko Lindner, and Roland Potthast. Convergence and numerics of a multisection method for scattering by three-dimensional rough surfaces. *SIAM Journal on Numerical Analysis*, 46(4):1780–1798, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HM06] **Hiptmair:2006:SFB**  
R. Hiptmair and P. Meury. Stabilized FEM-BEM coupling for Helmholtz transmission problems. *SIAM Journal on Numerical Analysis*, 44(5):2107–2130, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HM07] **Hofmann:2007:APF**  
Bernd Hofmann and Peter Mathé. Analysis of profile functions for general linear regularization methods. *SIAM Journal on Numerical Analysis*, 45(3):1122–1141, 2007. CO-
- DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HMN02] **Hsiao:2002:EAF**  
G. C. Hsiao, P. B. Monk, and N. Nigam. Error analysis of a finite element–integral equation scheme for approximating the time-harmonic Maxwell system. *SIAM Journal on Numerical Analysis*, 40(1):198–219, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38131>.
- [HMS02] **Higham:2002:SCE**  
Desmond J. Higham, Xuerong Mao, and Andrew M. Stuart. Strong convergence of Euler-type methods for nonlinear stochastic differential equations. *SIAM Journal on Numerical Analysis*, 40(3):1041–1063, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38953>.
- [HMS03] **Huang:2003:CAS**  
Weizhang Huang, Heping Ma, and Weiwei Sun. Convergence analysis of spectral collocation methods for a singular differential equation. *SIAM Journal on Numerical Analysis*, 41(6):2333–2349, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38953>.

[//epubs.siam.org/sam-bin/dbq/article/38102](http://epubs.siam.org/sam-bin/dbq/article/38102).

**Hundsdoerfer:2009:SCB**

- [HMS09] W. Hundsdoerfer, A. Mozartova, and M. N. Spijker. Stepsize conditions for boundedness in numerical initial value problems. *SIAM Journal on Numerical Analysis*, 47(5):3797–3819, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Higham:2007:ASM**

- [HMY07] Desmond J. Higham, Xuerong Mao, and Chenggui Yuan. Almost sure and moment exponential stability in the numerical simulation of stochastic differential equations. *SIAM Journal on Numerical Analysis*, 45(2):592–609, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hohage:2009:HSI**

- [HN09] Thorsten Hohage and Lothar Nannen. Hardy space infinite elements for scattering and resonance problems. *SIAM Journal on Numerical Analysis*, 47(2):972–996, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hochbruck:2005:EER**

- [HO05] Marlis Hochbruck and Alexander Ostermann. Explicit exponential Runge–Kutta methods

for semilinear parabolic problems. *SIAM Journal on Numerical Analysis*, 43(3):1069–1090, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61143>.

**Hansen:2008:FER**

- [HO08] Eskil Hansen and Alexander Ostermann. Finite element Runge–Kutta discretizations of porous medium–type equations. *SIAM Journal on Numerical Analysis*, 46(4):1769–1779, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hernandez:2009:LFF**

- [HO09] Erwin Hernández and Enrique Otárola. A locking-free FEM in active vibration control of a Timoshenko beam. *SIAM Journal on Numerical Analysis*, 47(4):2432–2454, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hochbruck:2009:ERT**

- [HOS09] Marlis Hochbruck, Alexander Ostermann, and Julia Schweitzer. Exponential Rosenbrock-type methods. *SIAM Journal on Numerical Analysis*, 47(1):786–803, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [HPS04] **Houston:2004:MDG**  
 Paul Houston, Ilaria Perugia, and Dominik Schotzau. Mixed discontinuous Galerkin approximation of the Maxwell operator. *SIAM Journal on Numerical Analysis*, 42(1):434–459, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41790>.
- [HPS05] **Homescu:2005:EER**  
 Chris Homescu, Linda R. Petzold, and Radu Serban. Error estimation for reduced-order models of dynamical systems. *SIAM Journal on Numerical Analysis*, 43(4):1693–1714, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60354>.
- [HR00] **Hettlich:2000:SDM**  
 F. Hettlich and W. Rundell. A second degree method for nonlinear inverse problems. *SIAM Journal on Numerical Analysis*, 37(2):587–620, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34124>.
- [HR06] **Holden:2006:CFD**  
 Helge Holden and Xavier Raynaud. Convergence of a finite difference scheme for the Camassa–Holm equation. *SIAM Journal on Numerical Analysis*, 44(4):1655–1680, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HR07] **Hild:2007:EES**  
 Patrick Hild and Yves Renard. An error estimate for the Signorini problem with Coulomb friction approximated by finite elements. *SIAM Journal on Numerical Analysis*, 45(5):2012–2031, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HR09] **Haslinger:2009:NFD**  
 Jaroslav Haslinger and Yves Renard. A new fictitious domain approach inspired by the extended finite element method. *SIAM Journal on Numerical Analysis*, 47(2):1474–1499, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HRS03] **Hundsdorfer:2003:MPL**  
 Willem Hundsdorfer, Steven J. Ruuth, and Raymond J. Spiteri. Monotonicity-preserving linear multistep methods. *SIAM Journal on Numerical Analysis*, 41(2):605–623, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40632>.

**Hollig:2001:WEB**

- [HRW01] Klaus Höllig, Ulrich Reif, and Joachim Wipper. Weighted extended B-spline approximation of Dirichlet problems. *SIAM Journal on Numerical Analysis*, 39(2):442–462, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37320>.

**Han:2000:EVI**

- [HS00] Weimin Han and Mircea Sofonea. Evolutionary variational inequalities arising in viscoelastic contact problems. *SIAM Journal on Numerical Analysis*, 38(2):556–579, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34730>.

**Hiptmair:2002:NBE**

- [HS02] R. Hiptmair and C. Schwab. Natural boundary element methods for the electric field integral equation on polyhedra. *SIAM Journal on Numerical Analysis*, 40(1):66–86, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38758>.

**He:2007:SCC**

- [HS07a] Yinnian He and Weiwei Sun. Stability and convergence of

the Crank–Nicolson/Adams–Bashforth scheme for the time-dependent Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 45(2):837–869, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hughes:2007:VMA**

- [HS07b] T. J. R. Hughes and G. Sangalli. Variational multiscale analysis: the fine-scale Green’s function, projection, optimization, localization, and stabilized methods. *SIAM Journal on Numerical Analysis*, 45(2):539–557, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hu:2008:LOR**

- [HS08] Jun Hu and Zhong-Ci Shi. Lower order rectangular non-conforming mixed finite elements for plane elasticity. *SIAM Journal on Numerical Analysis*, 46(1):88–102, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Hirao:2009:MCF**

- [HS09] Masatake Hirao and Masanori Sawa. On minimal cubature formulae of small degree for spherically symmetric integrals. *SIAM Journal on Numerical Analysis*, 47(4):3195–3211, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [HSS00] **Houston:2000:SHF** Paul Houston, Christoph Schwab, and Endre Süli. Stabilized hp-finite element methods for first-order hyperbolic problems. *SIAM Journal on Numerical Analysis*, 37(5):1618–1643, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34877>. [HT08]
- [HSS00] Nicholas Hale and Lloyd N. Trefethen. New quadrature formulas from conformal maps. *SIAM Journal on Numerical Analysis*, 46(2):930–948, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Hale:2008:NQF]
- [HSW05] **Hickernell:2005:PCA** Fred J. Hickernell, Ian H. Sloan, and Grzegorz W. Wasilkowski. A piecewise constant algorithm for weighted  $L_1$  approximation over bounded or unbounded regions in  $\mathbf{R}^s$ . *SIAM Journal on Numerical Analysis*, 43(3):1003–1020, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42766>. [HTCP09]
- [HSW05] Lanshan Han, Alok Tiwari, M. Kanat Camlibel, and Jong-Shi Pang. Convergence of time-stepping schemes for passive and extended linear complementarity systems. *SIAM Journal on Numerical Analysis*, 47(5):3768–3796, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Han:2009:CTS]
- [HTW02] **Heimsund:2002:SGF** BjOrn-Ove Heimsund, Xue-Cheng Tai, and Junping Wang. Superconvergence for the gradient of finite element approximations by  $L^2$  projections. *SIAM Journal on Numerical Analysis*, 40(4):1263–1280, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37410>. [HTW02]
- [HSY04] **Hu:2004:ESS** Qiya Hu, Zhongci Shi, and Dehao Yu. Efficient solvers for saddle-point problems arising from domain decompositions with Lagrange multipliers. *SIAM Journal on Numerical Analysis*, 42(3):905–933, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40410>. [HTW09]
- [HSY04] Qiya Hu, Xue-Cheng Tai, and Ragnar Winther. A saddle point approach to the computation of harmonic maps. *SIAM Journal on Numerical Analysis*, 47 [Hu:2009:SPA]



- (2):1500–1523, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [HV06]
- [Huh01] Marko Huhtanen. A matrix nearness problem related to iterative methods. *SIAM Journal on Numerical Analysis*, 39(2):407–422, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36362>.
- [Hun01] Willem Hundsdorfer. Partially implicit BDF2 blends for convection dominated flows. *SIAM Journal on Numerical Analysis*, 38(6):1763–1783, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36474>.
- [HV05] Chengming Huang and Stefan Vandewalle. Discretized stability and error growth of the nonautonomous pantograph equation. *SIAM Journal on Numerical Analysis*, 42(5):2020–2042, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41929>.
- [HW03] Houde Han and Xiaonan Wu. A fast numerical method for the Black–Scholes equation of American options. *SIAM Journal on Numerical Analysis*, 41(6):2081–2095, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39023>.
- [HW05] S. Hüber and B. I. Wohlmuth. An optimal A priori error estimate for nonlinear multi-body contact problems. *SIAM Journal on Numerical Analysis*, 43(1):156–173, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43667>.
- [HW09a] C. Hager and B. I. Wohlmuth. Analysis of a space–time discretization for dynamic elasticity problems based on mass-free

**Huybrechs:2006:EHO**

Daan Huybrechs and Stefan Vandewalle. On the evaluation of highly oscillatory integrals by analytic continuation. *SIAM Journal on Numerical Analysis*, 44(3):1026–1048, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Han:2003:FNM**

Houde Han and Xiaonan Wu. A fast numerical method for the Black–Scholes equation of American options. *SIAM Journal on Numerical Analysis*, 41(6):2081–2095, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39023>.

**Hueber:2005:OPE**

S. Hüber and B. I. Wohlmuth. An optimal A priori error estimate for nonlinear multi-body contact problems. *SIAM Journal on Numerical Analysis*, 43(1):156–173, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43667>.

**Hager:2009:AST**

C. Hager and B. I. Wohlmuth. Analysis of a space–time discretization for dynamic elasticity problems based on mass-free

- surface elements. *SIAM Journal on Numerical Analysis*, 47 (3):1863–1885, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [HY00]
- [HW09b] Thomas Hagstrom and Timothy Warburton. Complete radiation boundary conditions: Minimizing the long time error growth of local methods. *SIAM Journal on Numerical Analysis*, 47 (5):3678–3704, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [HX00] Sangwoo Heo and Yuan Xu. Invariant cubature formulae for spheres and balls by combinatorial methods. *SIAM Journal on Numerical Analysis*, 38(2):626–638, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35543>. [HZ07]
- [HX07] Ralf Hiptmair and Jinchao Xu. Nodal auxiliary space preconditioning in  $H(\text{curl})$  and  $H(\text{div})$  spaces. *SIAM Journal on Numerical Analysis*, 45(6):2483–2509, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [IK08]
- Hickernell:2000:MSD**  
Fred J. Hickernell and Rong-Xian Yue. The mean square discrepancy of scrambled  $(t, s)$ -sequences. *SIAM Journal on Numerical Analysis*, 38 (4):1089–1112, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35801>.
- Hu:2003:NDD**  
Qiya Hu and Jun Zou. A nonoverlapping domain decomposition method for Maxwell’s equations in three dimensions. *SIAM Journal on Numerical Analysis*, 41(5):1682–1708, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39690>.
- Hartinger:2007:CAP**  
Jürgen Hartinger and Volker Ziegler. On corner avoidance properties of random-start Halton sequences. *SIAM Journal on Numerical Analysis*, 45(3):1109–1121, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ito:2008:ROO**  
Kazufumi Ito and Karl Kunisch. Reduced-order optimal control based on approximate inertial manifolds for nonlinear dynamical systems. *SIAM Journal*

- on *Numerical Analysis*, 46(6): 2867–2891, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Jay00]
- [IKT01] Alexey F. Izmailov, Vladimir G. Karmanov, and Alexey A. Tretyakov. Regularization of linear approximate schemes by the gradient descent. *SIAM Journal on Numerical Analysis*, 39(1):250–263, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36452>. [Jay07]
- [IZ05] Arieh Iserles and Antonella Zanna. Efficient computation of the matrix exponential by generalized polar decompositions. *SIAM Journal on Numerical Analysis*, 42(5):2218–2256, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41593>. [JCK08]
- [IZ09] Liviu I. Ignat and Enrique Zuazua. Numerical dispersive schemes for the nonlinear Schrödinger equation. *SIAM Journal on Numerical Analysis*, 47(2):1366–1390, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Jang:2004:CBT]
- [Jay:2000:ISN] Laurent O. Jay. Inexact simplified Newton iterations for implicit Runge–Kutta methods. *SIAM Journal on Numerical Analysis*, 38(4):1369–1388, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36057>. [Jay:2007:SPA]
- [Jansson:2008:REB] Christian Jansson, Denis Chaykin, and Christian Keil. Rigorous error bounds for the optimal value in semidefinite programming. *SIAM Journal on Numerical Analysis*, 46(1):180–200, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Jiang:2004:CBT]
- [Jiang:2004:CBT] Lishang Jiang and Min Dai. Convergence of binomial tree methods for European/American path-dependent options. *SIAM Journal on Numerical Analysis*, 42(3):1094–1109, June

2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41422>. [JKR01]
- Jiang:2004:TDS**
- [Jia04] Yao-Lin Jiang. On time-domain simulation of lossless transmission lines with nonlinear terminations. *SIAM Journal on Numerical Analysis*, 42(3):1018–1031, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41888>. [JL02]
- Jegdic:2006:CIS**
- [JJ06] Katarina Jegdic and Robert L. Jerrard. Convergence of an implicit spacetime Godunov finite volume method for a class of hyperbolic systems. *SIAM Journal on Numerical Analysis*, 44(5):1921–1953, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [JLM08]
- Junge:2009:DFP**
- [JK09] Oliver Junge and Péter Koltai. Discretization of the Frobenius–Perron operator using a sparse Haar tensor basis: The sparse Ulam method. *SIAM Journal on Numerical Analysis*, 47(5):3464–3485, ??? 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Jakobsen:2001:CRO**
- Espen Robstad Jakobsen, Kenneth Hvistendahl Karlsen, and Nils Henrik Risebro. On the convergence rate of operator splitting for Hamilton–Jacobi equations with source terms. *SIAM Journal on Numerical Analysis*, 39(2):499–518, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36823>.
- John:2002:ANE**
- V. John and W. J. Layton. Analysis of numerical errors in large eddy simulation. *SIAM Journal on Numerical Analysis*, 40(3):995–1020, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37555>.
- John:2008:CTA**
- V. John, W. Layton, and C. C. Manica. Convergence of time-averaged statistics of finite element approximations of the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 46(1):151–179, ??? 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Jimenez:2006:LLM**
- [JPCH06] J. C. Jimenez, L. M. Pedroso, F. Carbonell, and V. Hernandez. Local linearization method

for numerical integration of delay differential equations. *SIAM Journal on Numerical Analysis*, 44(6):2584–2609, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Jin:2000:UAD**

- [JPT00] Shi Jin, Lorenzo Pareschi, and Giuseppe Toscani. Uniformly accurate diffusive relaxation schemes for multiscale transport equations. *SIAM Journal on Numerical Analysis*, 38(3):913–936, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34797>.

**Joly:2005:EAC**

- [JR05] Patrick Joly and Jerónimo Rodríguez. An error analysis of conservative space–time mesh refinement methods for the one-dimensional wave equation. *SIAM Journal on Numerical Analysis*, 43(2):825–859, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60343>.

**Jenkins:2002:PEE**

- [JRW02] Eleanor W. Jenkins, Ba'eatrice Rivia'ere, and Mary F. Wheeler. A priori error estimates for mixed finite element approximations of the acoustic wave equation. *SIAM Journal*

*on Numerical Analysis*, 40(5):1698–1715, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38806>.

**Ju:2000:NAP**

- [Ju00] Ning Ju. Numerical analysis of parabolic  $p$ -Laplacian: Approximation of trajectories. *SIAM Journal on Numerical Analysis*, 37(6):1861–1884, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33284>.

**Junk:2000:NPK**

- [Jun00] Michael Junk. A new perspective on kinetic schemes. *SIAM Journal on Numerical Analysis*, 38(5):1603–1625, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36285>.

**Jungel:2001:PPN**

- [Jün01] Ansgar Jüngel. A positivity-preserving numerical scheme for a nonlinear fourth order parabolic system. *SIAM Journal on Numerical Analysis*, 39(2):385–406, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36936>.

**Jovanovic:2003:CDS**

- [JV03] Bosko S. Jovanovic and Lubin G. Vulkov. On the convergence of difference schemes for hyperbolic problems with concentrated data. *SIAM Journal on Numerical Analysis*, 41(2):516–538, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38298>.

**Janssen:2002:CSA**

- [JVD02] Micha Janssen, Pascal Van Hentenryck, and Yves Deville. A constraint satisfaction approach for enclosing solutions to parametric ordinary differential equations. *SIAM Journal on Numerical Analysis*, 40(5):1896–1939, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39231>.

**Jiang:2000:MWR**

- [JW00a] Yao-Lin Jiang and Omar Wing. Monotone waveform relaxation for systems of nonlinear differential-algebraic equations. *SIAM Journal on Numerical Analysis*, 38(1):170–185, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34876>.

**Jiang:2000:NSP**

- [JW00b] Yao-Lin Jiang and Omar Wing. A note on the spectra and pseudospectra of waveform relaxation operators for linear differential-algebraic equations. *SIAM Journal on Numerical Analysis*, 38(1):186–201, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32706>.

**Jin:2006:HPS**

- [JW06] Shi Jin and Xin Wen. A Hamiltonian-preserving scheme for the Liouville equation of geometrical optics with partial transmissions and reflections. *SIAM Journal on Numerical Analysis*, 44(5):1801–1828, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Junk:2009:WSL**

- [JY09] Michael Junk and Wen-An Yong. Weighted  $L^2$ -stability of the lattice Boltzmann method. *SIAM Journal on Numerical Analysis*, 47(3):1651–1665, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Kacur:2001:SDC**

- [Kac01] J. Kacur. Solution of degenerate convection-diffusion problems by the method of characteristics. *SIAM Journal on Numerical Analysis*, 39(3):858–879,

- June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33664>.
- [Kal00] **Kaltenbacher:2000:PRN** [KD03]  
 Barbara Kaltenbacher. A projection-regularized Newton method for nonlinear ill-posed problems and its application to parameter identification problems with finite element discretization. *SIAM Journal on Numerical Analysis*, 37(6):1885–1908, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34732>.
- [Kaw08] **Kawai:2008:OIS**  
 Reiichiro Kawai. Optimal importance sampling parameter search for Lévy processes via stochastic approximation. *SIAM Journal on Numerical Analysis*, 47(1):293–307, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [kDH07]
- [KB02] **Khouider:2002:CEH**  
 Boualem Khouider and Anne Bourlioux. Computing the effective Hamiltonian in the Majda–Souganidis model of turbulent premixed flames. *SIAM Journal on Numerical Analysis*, 40(4):1330–1353, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [KDN00]
- Kearfott:2003:EVH**  
 R. Baker Kearfott and Jianwei Dian. Existence verification for higher degree singular zeros of nonlinear systems. *SIAM Journal on Numerical Analysis*, 41(6):2350–2373, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38872>.
- Kamga:2006:CCB**  
 Jean-Baptiste Apoung Kamga and Bruno Després. CFL condition and boundary conditions for DGM approximation of convection-diffusion. *SIAM Journal on Numerical Analysis*, 44(6):2245–2269, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- kDostal:2007:TSS**  
 Zdeněk Dostál and David Horák. Theoretically supported scalable FETI for numerical solution of variational inequalities. *SIAM Journal on Numerical Analysis*, 45(2):500–513, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Kearfott:2000:EVS**  
 R. Baker Kearfott, Jianwei Dian, and A. Neumaier. Ex-

- istence verification for singular zeros of complex nonlinear systems. *SIAM Journal on Numerical Analysis*, 38(2):360–379, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36107>. [Ker00]
- Kim:2008:BMM**
- [KDW08] Hyea Hyun Kim, Maksymilian Dryja, and Olof B. Widlund. A BDDC method for mortar discretizations using a transformation of basis. *SIAM Journal on Numerical Analysis*, 47(1):136–157, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [KF03]
- Knizhnerman:2009:OCR**
- [KDZ09] Leonid Knizhnerman, Vladimir Druskin, and Mikhail Zaslavsky. On optimal convergence rate of the rational Krylov subspace reduction for electromagnetic problems in unbounded domains. *SIAM Journal on Numerical Analysis*, 47(2):953–971, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [KGDD05]
- Kreiss:2001:EFO**
- [KEN01] Gunilla Kreiss, Gunilla Efraimsson, and Jan Nordström. Elimination of first order errors in shock calculations. *SIAM Journal on Numerical Analysis*, 38(6):1986–1998, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34941>.
- Kersey:2000:BNI**
- Scott Kersey. Best near-interpolation by curves: Existence. *SIAM Journal on Numerical Analysis*, 38(5):1666–1675, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35569>.
- Karatson:2003:VPQ**
- János Karátson and István Faragó. Variable preconditioning via quasi-Newton methods for nonlinear problems in Hilbert space. *SIAM Journal on Numerical Analysis*, 41(4):1242–1262, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38427>.
- Kuznetsov:2005:NPN**
- Yu. A. Kuznetsov, W. Govaerts, E. J. Doedel, and A. Dhooge. Numerical periodic normalization for codim 1 bifurcations of limit cycles. *SIAM Journal on Numerical Analysis*, 43(4):1407–1435, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38427>.



- [//epubs.siam.org/sam-bin/dbq/article/61130](http://epubs.siam.org/sam-bin/dbq/article/61130).
- [KHP02] Arturo Kohatsu-Higa and Roger Pettersson. Variance reduction methods for simulation of densities on Wiener space. *SIAM Journal on Numerical Analysis*, 40(2):431–450, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38550>.
- [KHY09] A. Kohatsu-Higa and Kazuhiro Yasuda. Estimating multi-dimensional density functions using the Malliavin–Thalmaier formula. *SIAM Journal on Numerical Analysis*, 47(2):1546–1575, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Kim02] Yong-Jung Kim. Piecewise self-similar solutions and a numerical scheme for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 40(6):2105–2132, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38136>.
- [Kim08a] Hyea Hyun Kim. A BDDC algorithm for mortar discretization of elasticity problems. *SIAM Journal on Numerical Analysis*, 46(4):2090–2111, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Kim08b] Hyea Hyun Kim. A FETI-DP formulation of three dimensional elasticity problems with mortar discretization. *SIAM Journal on Numerical Analysis*, 46(5):2346–2370, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KJ03] F. Y. Kuo and S. Joe. Component-by-component construction of good intermediate-rank lattice rules. *SIAM Journal on Numerical Analysis*, 41(4):1465–1486, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40716>.
- [KK00] Do Y. Kwak and Kwang Y. Kim. Mixed covolume methods for quasi-linear second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 38(4):1057–1072, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35855>.

**Kohatsu-Higa:2002:VRM**

**Kim:2008:FDf**

**Kohatsu-Higa:2009:EMD**

**Kuo:2003:CCC**

**Kim:2002:PSS**

**Kwak:2000:MCM**

**Kim:2008:BAM**

- Korotov:2001:ATR**
- [KK01] Sergey Korotov and Michal Krížek. Acute type refinements of tetrahedral partitions of polyhedral domains. *SIAM Journal on Numerical Analysis*, 39(2):724–733, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37040>.
- Kim:2002:CMG**
- [KK02a] Mi-Young Kim and Yonghoon Kwon. A collocation method for the Gurtin–MacCamy equation with finite life-span. *SIAM Journal on Numerical Analysis*, 39(6):1914–1937, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37092>.
- Knapek:2002:IOS**
- [KK02b] S. Knapek and F. Koster. Integral operators on sparse grids. *SIAM Journal on Numerical Analysis*, 39(5):1794–1809, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37542>.
- Karatson:2009:ADM**
- [KK09] János Karátson and Sergey Korotov. An algebraic discrete maximum principle in Hilbert space with applications to non-linear cooperative elliptic systems. *SIAM Journal on Numerical Analysis*, 47(4):2518–2549, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Kim:2005:PFD**
- [KL05] Hyea Hyun Kim and Chang-Ock Lee. A preconditioner for the FETI-DP formulation with mortar methods in two dimensions. *SIAM Journal on Numerical Analysis*, 42(5):2159–2175, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42338>.
- Kim:2006:MPC**
- [KL06] Do Wan Kim and Wing Kam Liu. Maximum principle and convergence analysis for the meshfree point collocation method. *SIAM Journal on Numerical Analysis*, 44(2):515–539, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Kopotun:2008:CSS**
- [KLP08] K. Kopotun, D. Leviatan, and A. V. Prymak. Constrained spline smoothing. *SIAM Journal on Numerical Analysis*, 46(4):1985–1997, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [KLPV01] **Kim:2001:MSM**  
 Chisup Kim, Raytcho D. Lazarov, Joseph E. Pasciak, and Panayot S. Vassilevski. Multiplier spaces for the mortar finite element method in three dimensions. *SIAM Journal on Numerical Analysis*, 39(2):519–538, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36706>.
- [KLQ<sup>+</sup>08] **Kelley:2008:PPC**  
 C. T. Kelley, Li-Zhi Liao, Liqun Qi, Moody T. Chu, J. P. Reese, and C. Winton. Projected pseudotransient continuation. *SIAM Journal on Numerical Analysis*, 46(6):3071–3083, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KLR06] **Kaya:2006:SSD**  
 Songul Kaya, William Layton, and Béatrice Rivière. Subgrid stabilized defect correction methods for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 44(4):1639–1654, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KLS03] **Kim:2003:PLS**  
 Sang Dong Kim, Hyung-Chun Lee, and Byeong Chun Shin. Pseudospectral least-squares method for the second-order elliptic boundary value problem. *SIAM Journal on Numerical Analysis*, 41(4):1370–1387, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39823>.
- [KM05] **Khoromskij:2003:BCF**  
 B. N. Khoromskij and J. M. Melenk. Boundary concentrated finite element methods. *SIAM Journal on Numerical Analysis*, 41(1):1–36, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39185>.
- [KM05] **Kaber:2005:ASP**  
 Sidi Mahmoud Kaber and Yvon Maday. Analysis of some Padé–Chebyshev approximants. *SIAM Journal on Numerical Analysis*, 43(1):437–454, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43670>.
- [KM06] **Korostyshevskaya:2006:MAO**  
 Oksana Korostyshevskaya and Susan E. Minkoff. A matrix analysis of operator-based up-scaling for the wave equation. *SIAM Journal on Numerical Analysis*, 44(2):586–612, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [KMM00] Sang Dong Kim, Thomas A. Manteuffel, and Stephen F. McCormick. First-Order System Least Squares (FOSLS) for spatial linear elasticity: Pure traction. *SIAM Journal on Numerical Analysis*, 38(5):1454–1482, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36146>.
- [KN08] Sang Dong Kim, Thomas A. Manteuffel, and Stephen F. McCormick. First-Order System Least Squares (FOSLS) for spatial linear elasticity: Pure traction. *SIAM Journal on Numerical Analysis*, 38(5):1454–1482, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36146>.
- [KMS05] Peter Kunkel, Volker Mehrmann, and Ronald Stöver. Multiple shooting for unstructured nonlinear differential-algebraic equations of arbitrary index. *SIAM Journal on Numerical Analysis*, 42(6):2277–2297, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41890>.
- [KN00] Raul Kangro and Roy Nicolaides. Far field boundary conditions for Black–Scholes equations. *SIAM Journal on Numerical Analysis*, 38(4):1357–1368, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35592>.
- [Kaya:2008:LOC] C. Yalçın Kaya and J. Lyle Noakes. Leapfrog for optimal control. *SIAM Journal on Numerical Analysis*, 46(6):2795–2817, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Kopteva:2001:MNP] Natalia Kopteva. Maximum norm A posteriori error estimates for a one-dimensional convection-diffusion problem. *SIAM Journal on Numerical Analysis*, 39(2):423–441, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36864>.
- [Kopteva:2003:EEU] Natalia Kopteva. Error expansion for an upwind scheme applied to a two-dimensional convection-diffusion problem. *SIAM Journal on Numerical Analysis*, 41(5):1851–1869, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41074>.
- [Kopteva:2008:MNP] Natalia Kopteva. Maximum norm A posteriori error estimate for a 2D singularly perturbed semilinear reaction-diffusion problem. *SIAM Journal on Numerical Analysis*, 46

- (3):1602–1618, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KOT05] Chiu-Yen Kao, Stanley Osher, and Yen-Hsi Tsai. Fast sweeping methods for static Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 42(6):2612–2632, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41960>.
- [KP03a] Ohannes A. Karakashian and Frederic Pascal. A posteriori error estimates for a discontinuous Galerkin approximation of second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 41(6):2374–2399, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40521>.
- [KP03b] Sang Dong Kim and Seymour V. Parter. Semicirculant preconditioning of elliptic operators. *SIAM Journal on Numerical Analysis*, 41(2):767–795, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40300>.
- [KP07] Ohannes A. Karakashian and Frederic Pascal. Convergence of adaptive discontinuous Galerkin approximations of second-order elliptic problems. *SIAM Journal on Numerical Analysis*, 45(2):641–665, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KPS06] Markos A. Katsoulakis, Petr Plecha, and Alexandros Sopasakis. Error analysis of coarse-graining for stochastic lattice dynamics. *SIAM Journal on Numerical Analysis*, 44(6):2270–2296, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KPT05] Sergei Konyagin, Bojan Popov, and Ognian Trifonov. On convergence of minmod-type schemes. *SIAM Journal on Numerical Analysis*, 42(5):1978–1997, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42386>.
- [KPY02] Heinz-Otto Kreiss, N. Anders Petersson, and Jacob Ystrom. Difference approximations for

- the second order wave equation. *SIAM Journal on Numerical Analysis*, 40(5):1940–1967, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39743>.
- [KPY04] Heinz-Otto Kreiss, N. Anders Petersson, and Jacob Yström. Difference approximations of the Neumann problem for the second order wave equation. *SIAM Journal on Numerical Analysis*, 42(3):1292–1323, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42827>.
- [KR00] Kenneth Hivstendahl Karlsen and Nils Henrik Risebro. Corrected operator splitting for nonlinear parabolic equations. *SIAM Journal on Numerical Analysis*, 37(3):980–1003, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32097>.
- [KR05] Songul Kaya and Béatrice Rivière. A discontinuous subgrid eddy viscosity method for the time-dependent Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 43(4):1572–1595, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43486>.
- [KRW08] Axel Klawonn, Oliver Rheinbach, and Olof B. Widlund. An analysis of a FETI–DP algorithm on irregular subdomains in the plane. *SIAM Journal on Numerical Analysis*, 46(5):2484–2504, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KS01a] R. Bruce Kellogg and Martin Stynes.  $n$ -widths and singularly perturbed boundary value problems II. *SIAM Journal on Numerical Analysis*, 39(2):690–707, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37148>.
- [KS01b] Natalia Kopteva and Martin Stynes. A robust adaptive method for a quasi-linear one-dimensional convection-diffusion problem. *SIAM Journal on Numerical Analysis*, 39(4):1446–1467, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37148>.

[//epubs.siam.org/sam-bin/dbq/article/38471](http://epubs.siam.org/sam-bin/dbq/article/38471).

**Korsawe:2005:LSM**

- [KS05] Johannes Korsawe and Gerhard Starke. A least-squares mixed finite element method for Biot's consolidation problem in porous media. *SIAM Journal on Numerical Analysis*, 43(1):318–339, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43292>.

**Kondratyuk:2008:OAF**

- [KS08a] Yaroslav Kondratyuk and Rob Stevenson. An optimal adaptive finite element method for the Stokes problem. *SIAM Journal on Numerical Analysis*, 46(2):747–775, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Kurbanmuradov:2008:CFW**

- [KS08b] O. Kurbanmuradov and K. Sabelfeld. Convergence of Fourier-wavelet models for Gaussian random processes. *SIAM Journal on Numerical Analysis*, 46(6):3084–3112, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Kay:2009:DPF**

- [KSS09] David Kay, Vanessa Styles, and Endre Süli. Discontinuous Galerkin finite element

approximation of the Cahn–Hilliard equation with convection. *SIAM Journal on Numerical Analysis*, 47(4):2660–2685, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Knobloch:2003:ENN**

- [KT03] Petr Knobloch and Lutz Tobiska. The  $P_1^{\text{mod}}$  element: A new nonconforming finite element for convection-diffusion problems. *SIAM Journal on Numerical Analysis*, 41(2):436–456, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40215>.

**Kroner:2005:NSC**

- [KT05] Dietmar Kröner and Mai Duc Thanh. Numerical solutions to compressible flows in a nozzle with variable cross-section. *SIAM Journal on Numerical Analysis*, 43(2):796–824, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60746>.

**Kwok:2008:CIM**

- [KT08] Felix Kwok and Hamdi A. Tchelepi. Convergence of implicit monotone schemes with applications in multiphase flow in porous media. *SIAM Journal on Numerical Analysis*, 46(5):2662–2687, 2008. CO-

- DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KT09] **Kim:2009:TLB**  
Hyea Hyun Kim and Xuemin Tu. A three-level BDDC algorithm for mortar discretizations. *SIAM Journal on Numerical Analysis*, 47(2):1576–1600, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KU02] **Klar:2002:USF**  
A. Klar and A. Unterreiter. Uniform stability of a finite difference scheme for transport equations in diffusive regimes. *SIAM Journal on Numerical Analysis*, 40(3):891–913, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37570>.
- [Küg03] **Kugler:2003:ITD**  
Philipp Kügler. Identification of a temperature dependent heat conductivity from single boundary measurements. *SIAM Journal on Numerical Analysis*, 41(4):1543–1563, January 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Kun01] **Kunert:2001:LPE**  
Gerd Kunert. A local problem error estimator for anisotropic tetrahedral finite element meshes. *SIAM Journal on Numerical Analysis*, 39(2):668–689, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35615>.
- [Kup06a] **Kuperberg:2006:NCA**  
Greg Kuperberg. Numerical cubature from Archimedes’ Hatbox Theorem. *SIAM Journal on Numerical Analysis*, 44(3):908–935, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Kup06b] **Kuperberg:2006:NCU**  
Greg Kuperberg. Numerical cubature using error-correcting codes. *SIAM Journal on Numerical Analysis*, 44(3):897–907, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Küt01] **Kuther:2001:EES**  
Marc Küther. Error estimates for the staggered Lax–Friedrichs scheme on unstructured grids. *SIAM Journal on Numerical Analysis*, 39(4):1269–1301, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37427>.
- [KV02] **Kunisch:2002:GPO**  
K. Kunisch and S. Volkwein. Galerkin proper orthogonal decomposition methods for a gen-



- eral equation in fluid dynamics. *SIAM Journal on Numerical Analysis*, 40(2):492–515, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38261>.
- [KW01] **Koch:2001:IDC** Othmar Koch and Ewa B. Weinmüller. Iterated defect correction for the solution of singular initial value problems. *SIAM Journal on Numerical Analysis*, 38(6):1784–1799, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36809>.
- [KW06] **Kim:2006:TLS** Hyea Hyun Kim and Olof B. Widlund. Two-level Schwarz algorithms with overlapping subregions for mortar finite elements. *SIAM Journal on Numerical Analysis*, 44(4):1514–1534, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [KWD02] **Klawonn:2002:DPF** Axel Klawonn, Olof B. Widlund, and Maksymilian Dryja. Dual-primal FETI methods for three-dimensional elliptic problems with heterogeneous coefficients. *SIAM Journal on Numerical Analysis*, 40(1):159–179, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38808>.
- [Kwe00] **Kweon:2000:DGM** Jae Ryong Kweon. A discontinuous Galerkin method for convection-dominated compressible viscous Navier–Stokes equations with an inflow boundary condition. *SIAM Journal on Numerical Analysis*, 38(3):699–717, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33663>.
- [KZ04] **Kozak:2004:GIP** Jernej Kozak and Emil Zagar. On geometric interpolation by polynomial curves. *SIAM Journal on Numerical Analysis*, 42(3):953–967, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42207>.
- [Lam05] **Lamba:2005:ESA** Harbir Lamba. The effective stability of adaptive timestepping ODE solvers. *SIAM Journal on Numerical Analysis*, 43(5):1950–1968, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43564>.

- [Lar00] **Larson:2000:PPE** Mats G. Larson. A posteriori and a priori error analysis for finite element approximations of self-adjoint elliptic eigenvalue problems. *SIAM Journal on Numerical Analysis*, 38(2):608–625, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32016>.
- [LaY09] Qun Lin and Lung an Ying. Interval inclusion computation for the solutions of the Burgers equation. *SIAM Journal on Numerical Analysis*, 47(4):2496–2517, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LBD<sup>+</sup>03] **Liu:2003:SEE** Yingjie Liu, Randolph E. Bank, Todd F. Dupont, Sonia Garcia, and Rafael F. Santos. Symmetric error estimates for moving mesh mixed methods for advection-diffusion equations. *SIAM Journal on Numerical Analysis*, 40(6):2270–2291, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38073>.
- [LBH03] **Lamarque:2003:SMM** Claude-Henri Lamarque, Jérôme Bastien, and Matthieu Holland. Study of a maximal monotone model with a delay term. *SIAM Journal on Numerical Analysis*, 41(4):1286–1300, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40254>.
- [LC00] **Cheng:2000:NIU** Xiao liang Cheng. On the nonlinear inexact Uzawa algorithm for saddle-point problems. *SIAM Journal on Numerical Analysis*, 37(6):1930–1934, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34926>.
- [LCNY08] **Luo:2008:MFE** Zhendong Luo, Jing Chen, I. M. Navon, and Xiaozhong Yang. Mixed finite element formulation and error estimates based on proper orthogonal decomposition for the nonstationary Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 47(1):1–19, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Lee99] **Lee:1999:FOS** B. Lee. First-order system least-squares for elliptic

- problems with Robin boundary conditions. *SIAM Journal on Numerical Analysis*, 37(1):70–104, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32531>.
- [Lee04] Hyesuk Lee. A multi-grid method for viscoelastic fluid flow. *SIAM Journal on Numerical Analysis*, 42(1):109–129, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41592>.
- [Leo01] Fabiana Leoni. Convergence of an approximation scheme for curvature-dependent motions of sets. *SIAM Journal on Numerical Analysis*, 39(4):1115–1131, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37045>.
- [Lep00] Olga Lepsky. Spectral viscosity approximations to Hamilton–Jacobi solutions. *SIAM Journal on Numerical Analysis*, 38(5):1439–1453, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35358>.
- [LF99] Donghui Li and Masao Fukushima. A globally and superlinearly convergent Gauss–Newton-based BFGS method for symmetric nonlinear equations. *SIAM Journal on Numerical Analysis*, 37(1):152–172, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33570>.
- [LFB02] Bingkun Li, Graeme Fairweather, and Bernard Bialecki. Discrete-time orthogonal spline collocation methods for vibration problems. *SIAM Journal on Numerical Analysis*, 39(6):2045–2065, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34872>.
- [LFPS06] María López-Fernández, César Palencia, and Achim Schädle. A spectral order method for inverting sectorial Laplace transforms. *SIAM Journal on Numerical Analysis*, 44(3):1332–1350, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Lee:2004:MMV****Leoni:2001:CAS****Lepsky:2000:SVA****Li:1999:GSC****Li:2002:DTO****Lopez-Fernandez:2006:SOM**

- [Lin06] **Ling:2006:FND** Leevan Ling. Finding numerical derivatives for unstructured and noisy data by multiscale kernels. *SIAM Journal on Numerical Analysis*, 44(4):1780–1800, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Lin07] **Lin:2007:CAQ** Ping Lin. Convergence analysis of a quasi-continuum approximation for a two-dimensional material without defects. *SIAM Journal on Numerical Analysis*, 45(1):313–332, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Lin08] **Lin:2008:DDL** Runchang Lin. Discontinuous discretization for least-squares formulation of singularly perturbed reaction-diffusion problems in one and two dimensions. *SIAM Journal on Numerical Analysis*, 47(1):89–108, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Lin09] **Linss:2009:ASS** Torsten Linss. Analysis of a system of singularly perturbed convection-diffusion equations with strong coupling. *SIAM Journal on Numerical Analysis*, 47(3):1847–1862, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Liu00] **Liu:2000:AFE** Biyue Liu. The analysis of a finite element method with streamline diffusion for the compressible Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 38(1):1–16, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33642>.
- [LL00] **Liu:2000:WAE** X. Q. Liu and C. W. Li. Weak approximations and extrapolations of stochastic differential equations with jumps. *SIAM Journal on Numerical Analysis*, 37(6):1747–1767, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34451>.
- [LL06] **Lu:2006:FSA** Shujuan Lü and Qishao Lu. Fourier spectral approximation to long-time behavior of dissipative generalized KdV–Burgers equations. *SIAM Journal on Numerical Analysis*, 44(2):561–585, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LLF01] **Liang:2001:PPS** Xue-Zhang Liang, Chun-Mei Lü, and Ren-Zhong Feng. Properly posed sets of nodes

- for multivariate Lagrange interpolation in  $C^s$ . *SIAM Journal on Numerical Analysis*, 39(2):587–595, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36156>.
- [LLK<sup>+</sup>04] Liping Liu, Tang Liu, Michal Krížek, Tao Lin, and Shuhua Zhang. Global superconvergence and A posteriori error estimators of the finite element method for a quasi-linear elliptic boundary value problem of nonmonotone type. *SIAM Journal on Numerical Analysis*, 42(4):1729–1744, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42840>.
- [LLRZ00] Tao Lin, Yanping Lin, Ming Rao, and Shuhua Zhang. Petrov–Galerkin methods for linear Volterra integro-differential equations. *SIAM Journal on Numerical Analysis*, 38(3):937–963, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33614>.
- [LM06] Tom Lyche and Jean-Louis Merrien. C1 interpolatory subdivision with shape constraints for curves. *SIAM Journal on Numerical Analysis*, 44(3):1095–1121, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LM07] Eunjung Lee and Thomas A. Manteuffel. FOSLL\* method for the eddy current problem with three-dimensional edge singularities. *SIAM Journal on Numerical Analysis*, 45(2):787–809, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LMPQ04] Barry Lee, Stephen F. McCormick, Bobby Philip, and Daniel J. Quinlan. Asynchronous fast adaptive composite-grid methods for elliptic problems: Theoretical foundations. *SIAM Journal on Numerical Analysis*, 42(1):130–152, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40076>.
- [LMR02] P. G. LeFloch, J. M. Mercier, and C. Rohde. Fully discrete, entropy conservative schemes of arbitrary order. *SIAM Journal on Numerical Analysis*, 40(5):1968–1992, October 2002.

ber 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40069>.

**Lebbah:2005:ESG**

[LMR<sup>+</sup>05] Yahia Lebbah, Claude Michel, Michel Rueher, David Daney, and Jean-Pierre Merlet. Efficient and safe global constraints for handling numerical constraint systems. *SIAM Journal on Numerical Analysis*, 42(5):2076–2097, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43617>.

**Liu:2004:PEE**

[LMTY04] Wenbin Liu, Heping Ma, Tao Tang, and Ningning Yan. A posteriori error estimates for discontinuous Galerkin time-stepping method for optimal control problems governed by parabolic equations. *SIAM Journal on Numerical Analysis*, 42(3):1032–1061, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39709>.

**Lee:2006:WNF**

[LMW06] E. Lee, T. A. Manteuffel, and C. R. Westphal. Weighted-norm first-order system least squares (FOSLS) for problems with corner singularities. *SIAM Journal*

*on Numerical Analysis*, 44(5):1974–1996, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Lee:2008:WNF**

[LMW08a] E. Lee, T. A. Manteuffel, and C. R. Westphal. Weighted-norm first-order system least-squares (FOSLS) for div/curl systems with three dimensional edge singularities. *SIAM Journal on Numerical Analysis*, 46(3):1619–1639, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Lord:2008:ESI**

[LMW08b] Gabriel Lord, Simon J. A. Malham, and Anke Wiese. Efficient strong integrators for linear stochastic systems. *SIAM Journal on Numerical Analysis*, 46(6):2892–2919, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Larson:2004:AND**

[LN04] Mats G. Larson and A. Jonas Niklasson. Analysis of a nonsymmetric discontinuous Galerkin method for elliptic problems: Stability and energy error estimates. *SIAM Journal on Numerical Analysis*, 42(1):252–264, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39709>.

[//epubs.siam.org/sam-bin/dbq/article/41316](http://epubs.siam.org/sam-bin/dbq/article/41316).

**Lakkis:2005:PEA**

- [LN05] Omar Lakkis and Ricardo H. Nochetto. A posteriori error analysis for the mean curvature flow of graphs. *SIAM Journal on Numerical Analysis*, 42(5):1875–1898, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43020>.

**Luskin:2009:ANB**

- [LO09] Mitchell Luskin and Christoph Ortner. An analysis of node-based cluster summation rules in the quasicontinuum method. *SIAM Journal on Numerical Analysis*, 47(4):3070–3086, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Lovadina:2005:LON**

- [Lov05] C. Lovadina. A low-order non-conforming finite element for Reissner–Mindlin plates. *SIAM Journal on Numerical Analysis*, 42(6):2688–2705, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60347>.

**Lord:2000:NCS**

- [LPSS00] Gabriel J. Lord, Daniela Peterhof, Björn Sandstede, and

Arnd Scheel. Numerical computation of solitary waves in infinite cylindrical domains. *SIAM Journal on Numerical Analysis*, 37(5):1420–1454, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33734>.

**Liu:2005:CAW**

- [LPWE05] Jiangguo Liu, Bojan Popov, Hong Wang, and Richard E. Ewing. Convergence analysis of wavelet schemes for convection-reaction equations under minimal regularity assumptions. *SIAM Journal on Numerical Analysis*, 43(2):521–539, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43383>.

**LeFloch:2000:HOS**

- [LR00] Philippe G. LeFloch and Christian Rohde. High-order schemes, entropy inequalities, and nonclassical shocks. *SIAM Journal on Numerical Analysis*, 37(6):2023–2060, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34525>.

**Lord:2002:TBE**

- [LR02] Gabriel J. Lord and Jacques Rougemont. Topological and  $\epsilon$ -entropy for large volume

- limits of discretized parabolic equations. *SIAM Journal on Numerical Analysis*, 40(4):1311–1329, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39232>.
- [LRR00] Salvatore Fabio Liotta, Vittorio Romano, and Giovanni Russo. Central schemes for balance laws of relaxation type. *SIAM Journal on Numerical Analysis*, 38(4):1337–1356, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36306>.
- [LRV00] Torsten Linss, Hans-Görg Roos, and Relja Vulanovic. Uniform pointwise convergence on Shishkin-type meshes for quasi-linear convection-diffusion problems. *SIAM Journal on Numerical Analysis*, 38(3):897–912, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35595>.
- [LS02] Ping Lin and Raymond J. Spiteri. A predicted sequential regularization method for index-2 Hessenberg DAEs. *SIAM Journal on Numerical Analysis*, 39(6):1889–1913, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38448>.
- [LS05] **Liotta:2000:CSB** Jörg Liesen and Paul E. Saylor. Orthogonal Hessenberg reduction and orthogonal Krylov subspace bases. *SIAM Journal on Numerical Analysis*, 42(5):2148–2158, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39337>.
- [LS06a] **Linss:2000:UPC** Jinwoo Lee and Dongwoo Sheen. A parallel method for backward parabolic problems based on the Laplace transformation. *SIAM Journal on Numerical Analysis*, 44(4):1466–1486, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LS06b] **Lin:2002:PSR** L. Lopez and V. Simoncini. Analysis of projection methods for rational function approximation to the matrix exponential. *SIAM Journal on Numerical Analysis*, 44(2):613–635, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Liesen:2005:OHR**
- Lee:2006:PMB**
- Lopez:2006:APM**



- Lasis:2007:VDG**
- [LS07a] Andris Lasis and Endre Süli. *hp*-version discontinuous Galerkin finite element method for semilinear parabolic problems. *SIAM Journal on Numerical Analysis*, 45(4):1544–1569, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [LSTZ07]
- Lord:2007:PSP**
- [LS07b] Gabriel J. Lord and Tony Shardlow. Postprocessing for stochastic parabolic partial differential equations. *SIAM Journal on Numerical Analysis*, 45(2):870–889, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [LSX08]
- Ling:2008:SCU**
- [LS08] Leevan Ling and Robert Schaback. Stable and convergent unsymmetric meshless collocation methods. *SIAM Journal on Numerical Analysis*, 46(3):1097–1115, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [LSY03]
- Lai:2009:DDM**
- [LS09] Ming-Jun Lai and Larry L. Schumaker. A domain decomposition method for computing bivariate spline fits of scattered data. *SIAM Journal on Numerical Analysis*, 47(2):911–928, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39276>. [Lu99]
- Liu:2007:CDG**
- Yingjie Liu, Chi-Wang Shu, Eitan Tadmor, and Mengping Zhang. Central discontinuous Galerkin methods on overlapping cells with a nonoscillatory hierarchical reconstruction. *SIAM Journal on Numerical Analysis*, 45(6):2442–2467, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Li:2008:DFA**
- Huiyuan Li, Jiachang Sun, and Yuan Xu. Discrete Fourier analysis, cubature, and interpolation on a hexagon and a triangle. *SIAM Journal on Numerical Analysis*, 46(4):1653–1681, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Layton:2003:CFF**
- William J. Layton, Friedrich Schieweck, and Ivan Yotov. Coupling fluid flow with porous media flow. *SIAM Journal on Numerical Analysis*, 40(6):2195–2218, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39276>.
- Lu:1999:SMT**
- Hao Lu. Stair matrices and their generalizations with ap-

- plications to iterative methods I: A generalization of the successive overrelaxation method. *SIAM Journal on Numerical Analysis*, 37(1):1–17, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34329>.
- [Luc08] Timothy A. Lucas. Operator splitting for an immunology model using reaction-diffusion equations with stochastic source terms. *SIAM Journal on Numerical Analysis*, 46(6):3113–3135, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LV04] J.-C. Latché and D. Vola. Analysis of the Brezzi–Pitkäranta stabilized Galerkin scheme for creeping flows of Bingham fluids. *SIAM Journal on Numerical Analysis*, 42(3):1208–1225, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42438>.
- [LV08a] Nathalie Lanson and Jean-Paul Vila. Renormalized meshfree schemes I: Consistency, stability, and hybrid methods for conservation laws. *SIAM Journal on Numerical Analysis*, 46(4):1912–1934, 2008. CO-
- [LV08b] DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Lanson:2008:RMSb**
- Nathalie Lanson and Jean-Paul Vila. Renormalized meshfree schemes II: Convergence for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 46(4):1935–1964, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Li:2000:UCS**
- [LW00a] Jichun Li and Mary F. Wheeler. Uniform convergence and superconvergence of mixed finite element methods on anisotropically refined grids. *SIAM Journal on Numerical Analysis*, 38(3):770–798, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35121>.
- Liu:2000:ALC**
- [LW00b] Chun Liu and Noel J. Walkington. Approximation of liquid crystal flows. *SIAM Journal on Numerical Analysis*, 37(3):725–741, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32728>.

- Liu:2000:CRR**
- [LW00c] Hailiang Liu and Gerald Warnecke. Convergence rates for relaxation schemes approximating conservation laws. *SIAM Journal on Numerical Analysis*, 37(4):1316–1337, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34688>.
- Lumsdaine:2003:KSA**
- [LW03] Andrew Lumsdaine and Deyun Wu. Krylov subspace acceleration of waveform relaxation. *SIAM Journal on Numerical Analysis*, 41(1):90–111, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31314>.
- Luce:2004:LPE**
- [LW04] R. Luce and B. I. Wohlmuth. A local A posteriori error estimator based on equilibrated fluxes. *SIAM Journal on Numerical Analysis*, 42(4):1394–1414, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43379>.
- Li:2006:BAI**
- [LW06a] Jing Li and Olof Widlund. BDDC algorithms for incompressible Stokes equations. *SIAM Journal on Numerical Analysis*, 44(6):2432–2455, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Liu:2006:CAE**
- [LW06b] Jian-Guo Liu and Wei-Cheng Wang. Convergence analysis of the energy and helicity preserving scheme for axisymmetric flows. *SIAM Journal on Numerical Analysis*, 44(6):2456–2480, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Liu:2007:CNA**
- [LW07] Chun Liu and Noel J. Walkington. Convergence of numerical approximations of the incompressible Navier–Stokes equations with variable density and viscosity. *SIAM Journal on Numerical Analysis*, 45(3):1287–1304, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Liu:2000:LSE**
- [LWW00] Hailiang Liu, Jinghua Wang, and Gerald Warnecke. The LIP+-stability and error estimates for a relaxation scheme. *SIAM Journal on Numerical Analysis*, 38(4):1154–1170, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35894>.

- Li:2002:NSC**
- [LWW02] T. Y. Li, Xiaoshen Wang, and Mengnien Wu. Numerical Schubert calculus by the Pieri homotopy algorithm. *SIAM Journal on Numerical Analysis*, 40(2):578–600, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39175>.
- Lin:2000:NCM**
- [LWX00] Wen-Wei Lin, Chern-Shuh Wang, and Quan-Fu Xu. Numerical computation of the minimal  $\mathbf{H}_\infty$  norm of the discrete-time output feedback control problem. *SIAM Journal on Numerical Analysis*, 38(2):515–547, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32020>.
- Li:2009:STS**
- [LX09] Xianjuan Li and Chuanju Xu. A space–time spectral method for the time fractional diffusion equation. *SIAM Journal on Numerical Analysis*, 47(3):2108–2131, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Liu:2001:PEE**
- [LY01a] Wenbin Liu and Ningning Yan. A posteriori error estimates for convex boundary control problems. *SIAM Journal on Numerical Analysis*, 39(1):73–99, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35218>.
- Liu:2001:QNL**
- [LY01b] Wenbin Liu and Ningning Yan. Quasi-norm local error estimators for  $p$ -Laplacian. *SIAM Journal on Numerical Analysis*, 39(1):100–127, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35161>.
- Liu:2002:QNI**
- [LY02a] Wenbin Liu and Ningning Yan. On quasi-norm interpolation error estimation and A posteriori error estimates for  $p$ -Laplacian. *SIAM Journal on Numerical Analysis*, 40(5):1870–1895, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39358>.
- Liu:2002:PEE**
- [LY02b] Wenbin Liu and Ningning Yan. A posteriori error estimates for control problems governed by Stokes equations. *SIAM Journal on Numerical Analysis*, 40(5):1850–1869, October 2002. CODEN SJNAAM.

- ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38400>.
- [LY09a] **Liu:2009:DDG** Hailiang Liu and Jue Yan. The Direct Discontinuous Galerkin (DDG) methods for diffusion problems. *SIAM Journal on Numerical Analysis*, 47(1):675–698, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LY09b] **Liu:2009:LPE** Wenbin Liu and Ningning Yan. Local a posteriori error estimates for convex boundary control problems. *SIAM Journal on Numerical Analysis*, 47(3):1886–1908, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LZ07] **Liu:2007:TSB** Fang Liu and Aihui Zhou. Two-scale Boolean Galerkin discretizations for Fredholm integral equations of the second kind. *SIAM Journal on Numerical Analysis*, 45(1):296–312, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [LZ08] **Lin:2008:NSP** Runchang Lin and Zhimin Zhang. Natural superconvergence points in three-dimensional finite elements. *SIAM Journal on Numerical Analysis*, 46(3):1281–1297, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Maj05] **Majidi:2005:LSG** Mohammad Majidi. Least-squares Galerkin methods for parabolic problems III: Semidiscrete case for semilinear problems. *SIAM Journal on Numerical Analysis*, 42(6):2452–2475, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40918>.
- [Man06] **Manservisi:2006:NAV** S. Manservisi. Numerical analysis of Vanka-type solvers for steady Stokes and Navier–Stokes flows. *SIAM Journal on Numerical Analysis*, 44(5):2025–2056, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Mar99] **Marthinsen:1999:ILG** Arne Marthinsen. Interpolation in Lie groups. *SIAM Journal on Numerical Analysis*, 37(1):269–285, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33886>.

- [Mar01] Leszek Marcinkowski. Domain decomposition methods for mortar finite element discretizations of plate problems. *SIAM Journal on Numerical Analysis*, 39(4):1097–1114, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37119>.
- [Mar05] Leszek Marcinkowski. A mortar finite element method for fourth order problems in two dimensions with Lagrange multipliers. *SIAM Journal on Numerical Analysis*, 42(5):1998–2019, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38757>.
- [Mat04] Peter Mathé. Saturation of regularization methods for linear ill-posed problems in Hilbert spaces. *SIAM Journal on Numerical Analysis*, 42(3):968–973, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42094>.
- [Mau09] Bertrand Maury. Numerical analysis of a finite element/
- volume penalty method. *SIAM Journal on Numerical Analysis*, 47(2):1126–1148, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Med00] T. Tachim Medjo. Numerical simulations of a two-layer quasi-geostrophic equation of the ocean. *SIAM Journal on Numerical Analysis*, 37(6):2005–2022, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34909>.
- [Med02] T. Tachim Medjo. Iterative methods for a class of robust control problems in fluid mechanics. *SIAM Journal on Numerical Analysis*, 39(5):1625–1647, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38167>.
- [Med07] T. Tachim Medjo. A small eddy correction method for a 3D Navier–Stokes-type system of equations related to the primitive equations of the ocean. *SIAM Journal on Numerical Analysis*, 45(5):1843–1870, 2007. CODEN SJNAAM. ISSN

- 0036-1429 (print), 1095-7170 (electronic).
- [Mel05] **Melenk:2005:HIN**  
 J. M. Melenk. *hp*-interpolation of nonsmooth functions and an application to *hp* — A posteriori error estimation. *SIAM Journal on Numerical Analysis*, 43(1):127–155, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43293>.
- [Men06] **Menzio:2006:ISK**  
 Stéphane Menozzi. Improved simulation for the killed Brownian motion in a cone. *SIAM Journal on Numerical Analysis*, 44(6):2610–2632, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Mer08] **Merlet:2008:EEF**  
 Benoit Merlet.  $L^\infty$ - and  $L^2$ -error estimates for a finite volume approximation of linear advection. *SIAM Journal on Numerical Analysis*, 46(1):124–150, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MG01] **Malgouyres:2001:EDP**  
 F. Malgouyres and F. Guichard. Edge direction preserving image zooming: A mathematical and numerical analysis. *SIAM Journal on Numerical Analysis*, 39(1):1–37, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36228>.
- [MG03] **Min:2003:CFA**  
 M. S. Min and D. Gottlieb. On the convergence of the Fourier approximation for eigenvalues and eigenfunctions of discontinuous problems. *SIAM Journal on Numerical Analysis*, 40(6):2254–2269, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40301>.
- [MG05] **Min:2005:DDS**  
 M. S. Min and D. Gottlieb. Domain decomposition spectral approximations for an eigenvalue problem with a piecewise constant coefficient. *SIAM Journal on Numerical Analysis*, 43(2):502–520, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42383>.
- [MGP00] **Meddahi:2000:FBF**  
 Salim Meddahi, María González, and Pablo Pérez. On a FEM–BEM formulation for an exterior quasilinear problem in the plane. *SIAM Journal on Numerical Analysis*, 37(6):1820–1837, Decem-

- ber 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33536>.
- [Mic02] Daniel Michelson. Stability of discrete shocks for difference approximations to systems of conservation laws. *SIAM Journal on Numerical Analysis*, 40(3):820–871, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37757>.
- [Mic03] Anthony Michel. A finite volume scheme for two-phase immiscible flow in porous media. *SIAM Journal on Numerical Analysis*, 41(4):1301–1317, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38273>.
- [Mis05] Siddhartha Mishra. Convergence of upwind finite difference schemes for a scalar conservation law with indefinite discontinuities in the flux function. *SIAM Journal on Numerical Analysis*, 43(2):559–577, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60274>.
- [MKB07] Jan Maes, Angela Kunoth, and Adhemar Bultheel. BPX-type preconditioners for second and fourth order elliptic problems on the sphere. *SIAM Journal on Numerical Analysis*, 45(1):206–222, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MM03] G. Mastroianni and G. Monegato. Truncated quadrature rules over  $(0, \infty)$  and Nyström-type methods. *SIAM Journal on Numerical Analysis*, 41(5):1870–1892, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39147>.
- [MMM04] H. R. MacMillan, T. A. Manteuffel, and S. F. McCormick. First-order system least squares and electrical impedance tomography. *SIAM Journal on Numerical Analysis*, 42(2):461–483, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41224>.

**Michelson:2002:SDS**

**Maes:2007:BTP**

**Mastroianni:2003:TQR**

**Michel:2003:FVS**

**MacMillan:2004:FOS**

**Mishra:2005:CUF**



- Manteuffel:2006:PMMb**
- [MMR06] Thomas A. Manteuffel, Stephen F. McCormick, and Oliver Röhrle. Projection multilevel methods for quasilinear elliptic partial differential equations: Theoretical results. *SIAM Journal on Numerical Analysis*, 44(1):139–152, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [MMSW06]
- Manteuffel:2006:FOS**
- T. A. Manteuffel, S. F. McCormick, J. G. Schmidt, and C. R. Westphal. First-order system least squares for geometrically nonlinear elasticity. *SIAM Journal on Numerical Analysis*, 44(5):2057–2081, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Manteuffel:2006:PMMa** [MN03]
- [MMRR06] Thomas A. Manteuffel, Stephen F. McCormick, Oliver Röhrle, and John Ruge. Projection multilevel methods for quasilinear elliptic partial differential equations: Numerical results. *SIAM Journal on Numerical Analysis*, 44(1):120–138, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [MN05]
- Makridakis:2003:ERP**
- Charalambos Makridakis and Ricardo H. Nochetto. Elliptic reconstruction and a posteriori error estimates for parabolic problems. *SIAM Journal on Numerical Analysis*, 41(4):1585–1594, January 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Mekchay:2005:CAF**
- Khamron Mekchay and Ricardo H. Nochetto. Convergence of adaptive finite element methods for general second order linear elliptic PDEs. *SIAM Journal on Numerical Analysis*, 43(5):1803–1827, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60929>.
- Meddahi:2003:CAW**
- [MMS03] Salim Meddahi, Antonio Márquez, and Virginia Selgas. Computing acoustic waves in an inhomogeneous medium of the plane by a coupling of spectral and finite elements. *SIAM Journal on Numerical Analysis*, 41(5):1729–1750, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40662>. [MNS00]
- Morin:2000:DOC**
- Pedro Morin, Ricardo H. Nochetto, and Kunibert G. Siebert. Data oscillation and

- convergence of adaptive FEM. *SIAM Journal on Numerical Analysis*, 38(2):466–488, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36004>. [MP01]
- Mao:2009:IEE**
- [MNS09] Shipeng Mao, Serge Nicaise, and Zhong-Ci Shi. On the interpolation error estimates for  $Q_1$  quadrilateral finite elements. *SIAM Journal on Numerical Analysis*, 47(1):467–486, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [MP02a]
- Moore:2005:FTC**
- [Moo05] Gerald Moore. Floquet theory as a computational tool. *SIAM Journal on Numerical Analysis*, 42(6):2522–2568, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43417>.
- Morton:2001:DUH**
- [Mor01] K. W. Morton. Discretization of unsteady hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 39(5):1556–1597, October 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37395>.
- Mathe:2001:ODI**
- Peter Mathé and Sergei V. Pereverzev. Optimal discretization of inverse problems in Hilbert scales. regularization and self-regularization of projection methods. *SIAM Journal on Numerical Analysis*, 38(6):1999–2021, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36175>.
- Marban:2002:NNM**
- J. M. Marbán and C. Palencia. A new numerical method for backward parabolic problems in the maximum-norm setting. *SIAM Journal on Numerical Analysis*, 40(4):1405–1420, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38642>.
- Mophou:2002:SGS**
- [MP02b] Gisèle Mophou and Pascal Poullet. A split Godunov scheme for solving one-dimensional hyperbolic systems in a non-conservative form. *SIAM Journal on Numerical Analysis*, 40(1):1–25, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37863>.

- [MP03] **Makridakis:2003:SCD**  
Charalambos Makridakis and Benoît Perthame. Sharp CFL, discrete kinetic formulation, and entropic schemes for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 41(3):1032–1051, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40299>.
- [MPP03] **Micheletti:2003:SFE**  
Stefano Micheletti, Simona Perotto, and Marco Picasso. Stabilized finite elements on anisotropic meshes: A priori error estimates for the advection-diffusion and the Stokes problems. *SIAM Journal on Numerical Analysis*, 41(3):1131–1162, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40375>.
- [MPPS02] **Markowich:2002:WMA**  
Peter A. Markowich, Paola Pietra, Carsten Pohl, and Hans Peter Stimming. A Wigner-measure analysis of the Dufort–Frankel scheme for the Schrödinger equation. *SIAM Journal on Numerical Analysis*, 40(4):1281–1310, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38173>.
- [MR07] **Marshall:2007:CVZ**  
Donald E. Marshall and Steffen Rohde. Convergence of a variant of the zipper algorithm for conformal mapping. *SIAM Journal on Numerical Analysis*, 45(6):2577–2609, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MRS00] **Manteuffel:2000:BFL**  
Thomas A. Manteuffel, Klaus J. Ressel, and Gerhard Starke. A boundary functional for the least-squares finite-element solution of neutron transport problems. *SIAM Journal on Numerical Analysis*, 37(2):556–586, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34470>.
- [MRT02a] **Milstein:2002:NMS**  
G. N. Milstein, Yu. M. Repin, and M. V. Tretyakov. Numerical methods for stochastic systems preserving symplectic structure. *SIAM Journal on Numerical Analysis*, 40(4):1583–1604, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39558>.
- [MRT02b] **Milstein:2002:SIH**  
G. N. Milstein, Yu. M. Repin, and M. V. Tretyakov. Sym-

- plectic integration of Hamiltonian systems with additive noise. *SIAM Journal on Numerical Analysis*, 39(6): 2066–2088, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38744>.
- [MS00a] Heping Ma and Weiwei Sun. A Legendre–Petrov–Galerkin and Chebyshev collocation method for third-order differential equations. *SIAM Journal on Numerical Analysis*, 38(5):1425–1438, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36150>. **Ma:2000:LPG** [MS01b]
- [MS00b] Salim Meddahi and Francisco-Javier Sayas. A fully discrete BEM–FEM for the exterior Stokes problem in the plane. *SIAM Journal on Numerical Analysis*, 37(6): 2082–2102, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34102>. **Meddahi:2000:FDB** [MS02]
- [MS01a] Heping Ma and Weiwei Sun. Optimal error estimates of the Legendre–Petrov–Galerkin method for the Korteweg–de Vries equation. *SIAM Journal on Numerical Analysis*, 39(4):1380–1394, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37832>. **Majidi:2001:LSG**
- Mohammad Majidi and Gerhard Starke. Least-squares Galerkin methods for parabolic problems I: Semidiscretization in time. *SIAM Journal on Numerical Analysis*, 39(4):1302–1323, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37012>. **Majidi:2002:LSGb**
- Mohammad Majidi and Gerhard Starke. Least-squares Galerkin methods for parabolic problems II: The fully discrete case and adaptive algorithms. *SIAM Journal on Numerical Analysis*, 39(5):1648–1666, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37946>. **Mommer:2009:GOA**
- [MS09] Mario S. Mommer and Rob Stevenson. A goal-oriented adaptive finite element method with convergence rates. *SIAM*

- Journal on Numerical Analysis*, 47(2):861–886, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MST00] Matthias Maischak., Ernst P. Stephan, and Thanh Tran. Multiplicative Schwarz algorithms for the Galerkin boundary element method. *SIAM Journal on Numerical Analysis*, 38(4):1243–1268, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32398>.
- [MST05] Heping Ma, Weiwei Sun, and Tao Tang. Hermite spectral methods with a time-dependent scaling for parabolic equations in unbounded domains. *SIAM Journal on Numerical Analysis*, 43(1):58–75, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42127>.
- [MST06] Francesca Mazzia, Alessandra Sestini, and Donato Trigiante. B-spline linear multistep methods and their continuous extensions. *SIAM Journal on Numerical Analysis*, 44(5):1954–1973, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MST07] Yvon Maday, Julien Salomon, and Gabriel Turinici. Monotonic parareal control for quantum systems. *SIAM Journal on Numerical Analysis*, 45(6):2468–2482, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MSTZ08] E. Mordecki, A. Szepessy, R. Tempone, and G. E. Zouraris. Adaptive weak approximation of diffusions with jumps. *SIAM Journal on Numerical Analysis*, 46(4):1732–1768, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MSZ08] Jin Ma, Jie Shen, and Yanhong Zhao. On numerical approximations of forward-backward stochastic differential equations. *SIAM Journal on Numerical Analysis*, 46(5):2636–2661, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MT04] T. Tachim Medjo and L. R. Tcheugoue Tebou. Adjoint-based iterative method for robust control problems in fluid mechanics. *SIAM Journal on Numerical*

- Analysis*, 42(1):302–325, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41623>.
- [MTW05] **Milstein:2005:NIS**  
G. N. Milstein and M. V. Tretyakov. Numerical integration of stochastic differential equations with nonglobally Lipschitz coefficients. *SIAM Journal on Numerical Analysis*, 43(3):1139–1154, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61202>.
- [MT09] **Milstein:2009:PVR**  
G. N. Milstein and M. V. Tretyakov. Practical variance reduction via regression for simulating diffusions. *SIAM Journal on Numerical Analysis*, 47(2):887–910, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [MTW02] **Mardal:2002:RFE**  
Kent Andre Mardal, Xue-Cheng Tai, and Ragnar Winther. A robust finite element method for Darcy–Stokes flow. *SIAM Journal on Numerical Analysis*, 40(5):1605–1631, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38391>.
- [MTW03] **Margolin:2003:PGN**  
Len G. Margolin, Edriss S. Titi, and Shannon Wynne. The postprocessing Galerkin and nonlinear Galerkin methods—A truncation analysis point of view. *SIAM Journal on Numerical Analysis*, 41(2):695–714, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39050>.
- [MV00] **Moussa:2000:CSM**  
B. Ben Moussa and J. P. Vila. Convergence of SPH method for scalar nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 37(3):863–887, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30711>.
- [MV03] **Michel:2003:EFP**  
Anthony Michel and Julien Vovelle. Entropy formulation for parabolic degenerate equations with general Dirichlet boundary conditions and application to the convergence of FV methods. *SIAM Journal on Numerical Analysis*, 41(6):2262–2293, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38391>.

- [//epubs.siam.org/sam-bin/dbq/article/40661](http://epubs.siam.org/sam-bin/dbq/article/40661).
- Mu:2007:TGM**
- [MX07] Mo Mu and Jinchao Xu. A two-grid method of a mixed Stokes–Darcy model for coupling fluid flow with porous media flow. *SIAM Journal on Numerical Analysis*, 45(5):1801–1813, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Negreanu:2008:CST**
- [Neg08] Mihaela Negreanu. Convergence of a semidiscrete two-grid algorithm for the controllability of the  $1 - d$  wave equation. *SIAM Journal on Numerical Analysis*, 46(6):3233–3263, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Nicaise:2001:EEA**
- [Nic01] Serge Nicaise. Edge elements on anisotropic meshes and approximation of the Maxwell equations. *SIAM Journal on Numerical Analysis*, 39(3):784–816, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36988>.
- Nicaise:2005:PEE**
- [Nic05] Serge Nicaise. A posteriori error estimations of some cell-centered finite volume methods. *SIAM Journal on Numerical Analysis*, 43(4):1481–1503, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43778>.
- Nicaise:2006:PEE**
- [Nic06] Serge Nicaise. A posteriori error estimations of some cell centered finite volume methods for diffusion-convection-reaction problems. *SIAM Journal on Numerical Analysis*, 44(3):949–978, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Nikolova:2002:MCF**
- [Nik02] Mila Nikolova. Minimizers of cost-functions involving nonsmooth data-fidelity terms. application to the processing of outliers. *SIAM Journal on Numerical Analysis*, 40(3):965–994, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38916>.
- Neher:2007:TMB**
- [NJV07] M. Neher, K. R. Jackson, and N. S. Nedialkov. On Taylor model based integration of ODEs. *SIAM Journal on Numerical Analysis*, 45(1):236–262, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [Not07] **Notay:2007:CAP**  
 Yvan Notay. Convergence analysis of perturbed two-grid and multigrid methods. *SIAM Journal on Numerical Analysis*, 45(3):1035–1044, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Nou01] **Noussair:2001:RPN**  
 Ahmed Nussair. Riemann problem with nonlinear resonance effects and well-balanced Godunov scheme for shallow fluid flow past an obstacle. *SIAM Journal on Numerical Analysis*, 39(1):52–72, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32038>.
- [NP00] **Naldi:2000:NSH**  
 Giovanni Naldi and Lorenzo Pareschi. Numerical schemes for hyperbolic systems of conservation laws with stiff diffusive relaxation. *SIAM Journal on Numerical Analysis*, 37(4):1246–1270, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32881>.
- [NP05] **Nochetto:2005:GUF**  
 Ricardo H. Nochetto and Jae-Hong Pyo. The Gauge–Uzawa finite element method. Part I: The Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 43(3):1043–1068, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60975>.
- [NPSK07] **Nilsson:2007:SDA**  
 Stefan Nilsson, N. Anders Petersson, Björn Sjögreen, and Heinz-Otto Kreiss. Stable difference approximations for the elastic wave equation in second order formulation. *SIAM Journal on Numerical Analysis*, 45(5):1902–1936, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [NS01] **Norburn:2001:FAS**  
 Sean Norburn and David Silvester. Fourier analysis of stabilized  $Q_1$ – $Q_1$  mixed finite element approximation. *SIAM Journal on Numerical Analysis*, 39(3):817–833, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36227>.
- [NS03] **Nabben:2003:CTR**  
 Reinhard Nabben and Daniel B. Szyld. Convergence theory of restricted multiplicative Schwarz methods. *SIAM Journal on Numerical Analysis*, 40(6):2318–2336, December 2003. CODEN SJNAAM.



- ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38944>. [NT02]
- [NS05] **Nordstrom:2005:WPB**  
Jan Nordström and Magnus Svärd. Well-posed boundary conditions for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 43(3):1231–1255, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60497>.
- [NS09] **Nicholls:2009:RNA**  
David P. Nicholls and Jie Shen. A rigorous numerical analysis of the transformed field expansion method. *SIAM Journal on Numerical Analysis*, 47(4):2708–2734, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [NSV05] **Nochetto:2005:FLP**  
Ricardo H. Nochetto, Kunibert G. Siebert, and Andreas Veiser. Fully localized A posteriori error estimators and barrier sets for contact problems. *SIAM Journal on Numerical Analysis*, 42(5):2118–2135, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42440>. [NV04]
- Nakaki:2002:FDS**  
Tatsuyuki Nakaki and Kenji Tomoeda. A finite difference scheme for some nonlinear diffusion equations in an absorbing medium: Support splitting phenomena. *SIAM Journal on Numerical Analysis*, 40(3):945–964, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38030>.
- [NTW08a] **Nobile:2008:ASG**  
F. Nobile, R. Tempone, and C. G. Webster. An anisotropic sparse grid stochastic collocation method for partial differential equations with random input data. *SIAM Journal on Numerical Analysis*, 46(5):2411–2442, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [NTW08b] **Nobile:2008:SGS**  
F. Nobile, R. Tempone, and C. G. Webster. A sparse grid stochastic collocation method for partial differential equations with random input data. *SIAM Journal on Numerical Analysis*, 46(5):2309–2345, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Nabben:2004:CDC**  
R. Nabben and C. Vuik. A comparison of deflation and

- coarse grid correction applied to porous media flow. *SIAM Journal on Numerical Analysis*, 42(4):1631–1647, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43045>. [OD09]
- [NZ04] Ahmed Naga and Zhimin Zhang. A posteriori error estimates based on the polynomial preserving recovery. *SIAM Journal on Numerical Analysis*, 42(4):1780–1800, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41300>. [Oel02]
- [NZ06] Mihaela Negreanu and Enrique Zuazua. Discrete Ingham inequalities and applications. *SIAM Journal on Numerical Analysis*, 44(1):412–448, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Olv09]
- [Obe06] Adam M. Oberman. Convergent difference schemes for degenerate elliptic and parabolic equations: Hamilton–Jacobi equations and free boundary problems. *SIAM Journal on Numerical Analysis*, 44(2):879–895, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [OP00]
- [Oliver:2009:ADC] Todd A. Oliver and David L. Darmofal. Analysis of dual consistency for discontinuous Galerkin discretizations of source terms. *SIAM Journal on Numerical Analysis*, 47(5):3507–3525, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Oelschlager:2002:SSV] Karl Oelschläger. Simulation of the solution of a viscous porous medium equation by a particle method. *SIAM Journal on Numerical Analysis*, 40(5):1716–1762, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36337>. [Olver:2009:GDO] Sheehan Olver. GMRES for the differentiation operator. *SIAM Journal on Numerical Analysis*, 47(5):3359–3373, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Ostermann:2000:SNP] Alexander Ostermann and Cesar Palencia. Shadowing for nonautonomous parabolic problems with applications to long-time error bounds. *SIAM*

- Journal on Numerical Analysis*, 37(5):1399–1419, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35103>. [Ort09]
- Omnes:2009:PEE**
- [OPR09] Pascal Omnes, Yohan Penel, and Yann Rosenbaum. A posteriori error estimation for the discrete duality finite volume discretization of the Laplace equation. *SIAM Journal on Numerical Analysis*, 47(4):2782–2807, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [OS07]
- Olshanskii:2004:CAM**
- [OR04] Maxim A. Olshanskii and Arnold Reusken. Convergence analysis of a multigrid method for a convection-dominated model problem. *SIAM Journal on Numerical Analysis*, 42(3):1261–1291, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41867>. [Ova07]
- Olshanskii:2009:FEM**
- [ORG09] Maxim A. Olshanskii, Arnold Reusken, and Jörg Grande. A finite element method for elliptic equations on surfaces. *SIAM Journal on Numerical Analysis*, 47(5):3339–3358, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Ortner:2009:PEN]
- Ortner:2009:PEN**
- C. Ortner. A posteriori existence in numerical computations. *SIAM Journal on Numerical Analysis*, 47(4):2550–2577, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Ortner:2007:DFG]
- Ortner:2007:DFG**
- Christoph Ortner and Endre Süli. Discontinuous Galerkin finite element approximation of nonlinear second-order elliptic and hyperbolic systems. *SIAM Journal on Numerical Analysis*, 45(4):1370–1397, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Ovall:2007:FGH]
- Ovall:2007:FGH**
- Jeffrey S. Ovall. Function, gradient, and Hessian recovery using quadratic edge-bump functions. *SIAM Journal on Numerical Analysis*, 45(3):1064–1080, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Ovtchinnikov:2003:CEGa]
- Ovtchinnikov:2003:CEGa**
- E. Ovtchinnikov. Convergence estimates for the generalized Davidson method for symmetric eigenvalue problems I: The preconditioning aspect. *SIAM Journal on Numerical Analysis*, 41(1):258–271, February 2003. CODEN SJNAAM.

- ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41175>. [oWZ06]
- Ovtchinnikov:2003:CEGb**
- [Ovt03b] E. Ovtchinnikov. Convergence estimates for the generalized Davidson method for symmetric eigenvalue problems II: The subspace acceleration. *SIAM Journal on Numerical Analysis*, 41(1):272–286, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41176>.
- Ovtchinnikov:2008:JCEa**
- [Ovt08a] E. E. Ovtchinnikov. Jacobi correction equation, line search, and conjugate gradients in Hermitian eigenvalue computation I: Computing an extreme eigenvalue. *SIAM Journal on Numerical Analysis*, 46(5):2567–2592, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ovtchinnikov:2008:JCEb**
- [Ovt08b] E. E. Ovtchinnikov. Jacobi correction equation, line search, and conjugate gradients in Hermitian eigenvalue computation II: Computing several extreme eigenvalues. *SIAM Journal on Numerical Analysis*, 46(5):2593–2619, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- ova:2006:SEG**
- M. Lukáčová-Medvi ová, G. Warnecke, and Y. Zahaykah. On the stability of evolution Galerkin schemes applied to a two-dimensional wave equation system. *SIAM Journal on Numerical Analysis*, 44(4):1556–1583, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Owhadi:2008:HPE**
- [OZ08] Houman Owhadi and Lei Zhang. Homogenization of parabolic equations with a continuum of space and time scales. *SIAM Journal on Numerical Analysis*, 46(1):1–36, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Palacian:2004:IP1**
- [Pal04] Jesús Palacián. Integration of perturbed initial value problems through reduction theory. *SIAM Journal on Numerical Analysis*, 42(2):878–904, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42099>.
- Pao:2001:NMT**
- [Pao01] C. V. Pao. Numerical methods for time-periodic solutions of nonlinear parabolic boundary value problems. *SIAM Journal on Numerical Analysis*, 39(2):647–667, April 2001.

- CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36139>.
- [Pao07] **Pao:2007:NMQ**  
C. V. Pao. Numerical methods for quasi-linear elliptic equations with nonlinear boundary conditions. *SIAM Journal on Numerical Analysis*, 45(3):1081–1106, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Par01a] **Pareschi:2001:CDB**  
Lorenzo Pareschi. Central differencing based numerical schemes for hyperbolic conservation laws with relaxation terms. *SIAM Journal on Numerical Analysis*, 39(4):1395–1417, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37590>.
- [Par01b] **Parter:2001:PLSa**  
Seymour V. Parter. Preconditioning Legendre spectral collocation methods for elliptic problems I: Finite difference operators. *SIAM Journal on Numerical Analysis*, 39(1):330–347, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36506>.
- [Par01c] **Parter:2001:PLSb**  
Seymour V. Parter. Preconditioning Legendre spectral collocation methods for elliptic problems II: Finite element operators. *SIAM Journal on Numerical Analysis*, 39(1):348–362, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36507>.
- [Par06] **Pares:2006:NMN**  
Carlos Parés. Numerical methods for nonconservative hyperbolic systems: a theoretical framework. *SIAM Journal on Numerical Analysis*, 44(1):300–321, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [PD05] **Platte:2005:PPT**  
Rodrigo B. Platte and Tobin A. Driscoll. Polynomials and potential theory for Gaussian radial basis function interpolation. *SIAM Journal on Numerical Analysis*, 43(2):750–766, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61014>.
- [PDP06] **Pirsic:2006:CDN**  
Gottlieb Pirsic, Josef Dick, and Friedrich Pillichshammer.

- Cyclic digital nets, hyperplane nets, and multivariate integration in Sobolev spaces. *SIAM Journal on Numerical Analysis*, 44(1):385–411, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Per02]
- Peherstorfer:2009:GTQ**
- [Peh09] Franz Peherstorfer. Gauss–Turán quadrature formulas: Asymptotics of weights. *SIAM Journal on Numerical Analysis*, 47(4):2638–2659, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Per09]
- Pena:2000:MHS**
- [Peñ00] J. M. Peña. On the multivariate Horner scheme. *SIAM Journal on Numerical Analysis*, 37(4):1186–1197, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32415>. [PF02]
- Pena:2003:SPS**
- [Peñ03] J. M. Peña. Scaled pivots and scaled partial pivoting strategies. *SIAM Journal on Numerical Analysis*, 41(3):1022–1031, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39516>. [PFF08]
- Perkins:2002:CAD**
- Chris Perkins. A convergence analysis of Dykstra’s algorithm for polyhedral sets. *SIAM Journal on Numerical Analysis*, 40(2):792–804, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36755>.
- Peradze:2009:AAK**
- Jemal Peradze. An approximate algorithm for a Kirchhoff wave equation. *SIAM Journal on Numerical Analysis*, 47(3):2243–2268, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Pani:2002:GMF**
- Amiya K. Pani and Graeme Fairweather. An  $H^1$ -Galerkin mixed finite element method for an evolution equation with a positive-type memory term. *SIAM Journal on Numerical Analysis*, 40(4):1475–1490, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37231>.
- Pani:2008:ADI**
- Amiya Kumar Pani, Graeme Fairweather, and Ryan I. Fernandes. Alternating direction implicit orthogonal spline collocation methods for an evolu-

- tion equation with a positive-type memory term. *SIAM Journal on Numerical Analysis*, 46(1):344–364, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Pfl00] **Pflaum:2000:RCM**  
 Christoph Pflaum. Robust convergence of multi-level algorithms for convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 37(2):443–469, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34687>.
- [Pie05] **Pierre:2005:WSB**  
 Morgan Pierre. Weak series  $BV$  convergence of a moving finite-element method for singular axisymmetric harmonic maps. *SIAM Journal on Numerical Analysis*, 43(4):1436–1454, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60503>.
- [Pin04] **Pinnau:2004:UCE**  
 René Pinnau. Uniform convergence of an exponentially fitted scheme for the quantum drift diffusion model. *SIAM Journal on Numerical Analysis*, 42(4):1648–1668, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42996>.
- [PJ01] **Pedreira:2001:MCG**  
 Dolores Gómez Pedreira and Patrick Joly. A method for computing guided waves in integrated optics. Part I: Mathematical analysis. *SIAM Journal on Numerical Analysis*, 39(2):596–623, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36827>.
- [PJ02] **Pedreira:2002:MCGb**  
 Dolores Gómez Pedreira and Patrick Joly. A method for computing guided waves in integrated optics. Part II: Numerical approximation and error analysis. *SIAM Journal on Numerical Analysis*, 39(5):1684–1711, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37771>.
- [Pon07] **Poncet:2007:ADT**  
 Philippe Poncet. Analysis of direct three-dimensional parabolic panel methods. *SIAM Journal on Numerical Analysis*, 45(6):2259–2297, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [PP00] Franz Peherstorfer and Knut Petras. Ultraspherical Gauss–Kronrod quadrature is not possible for  $\lambda > 3$ . *SIAM Journal on Numerical Analysis*, 37(3):927–948, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32774>.
- [PR01] Andreas Prohl and Michael Ruzicka. On fully implicit space–time discretization for motions of incompressible fluids with shear-dependent viscosities: The case  $p \leq 2$ . *SIAM Journal on Numerical Analysis*, 39(1):214–249, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37120>.
- [PPT05] Inga Parts, Arvet Pedas, and Enn Tamme. Piecewise polynomial collocation for Fredholm integro-differential equations with weakly singular kernels. *SIAM Journal on Numerical Analysis*, 43(5):1897–1911, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61245>.
- [PR00] Lorenzo Pareschi and Giovanni Russo. Numerical solution of the Boltzmann equation I: Spectrally accurate approximation of the collision operator. *SIAM Journal on Numerical Analysis*, 37(4):1217–1245, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34330>.
- [Pro08a] Andreas Prohl. Convergence of a finite element-based space–time discretization in elastodynamics. *SIAM Journal on Numerical Analysis*, 46(5):2469–2483, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Pro08b] Andreas Prohl. On pressure approximation via projection methods for nonstationary incompressible Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 47(1):158–180, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [PS02a] Laetitia Paoli and Michelle Schatzman. A numerical scheme for impact problems I: The one-dimensional case.

**Peherstorfer:2000:UGK**

**Prohl:2001:FIS**

**Parts:2005:PPC**

**Prohl:2008:CFE**

**Pareschi:2000:NSB**

**Prohl:2008:PAP**

**Paoli:2002:NSIa**



*SIAM Journal on Numerical Analysis*, 40(2):702–733, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37872>.

**Paoli:2002:NSIb**

[PS02b]

Laetitia Paoli and Michelle Schatzman. A numerical scheme for impact problems II: The multidimensional case. *SIAM Journal on Numerical Analysis*, 40(2):734–768, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37873>.

**Park:2003:NQF**

[PS03]

Chunjae Park and Dongwoo Sheen.  $P_1$ -nonconforming quadrilateral finite element methods for Second-Order elliptic problems. *SIAM Journal on Numerical Analysis*, 41(2):624–640, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40492>.

**Pelinovsky:2004:CPI**

[PS04]

Dmitry E. Pelinovsky and Yury A. Stepanyants. Convergence of Petviashvili’s iteration method for numerical approximation of stationary solutions of nonlinear wave equations. *SIAM Journal on Numer-*

*ical Analysis*, 42(3):1110–1127, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41423>.

**Pereverzev:2005:ASP**

[PS05]

Sergei Pereverzev and Eberhard Schock. On the adaptive selection of the parameter in regularization of ill-posed problems. *SIAM Journal on Numerical Analysis*, 43(5):2060–2076, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43381>.

**Peterseim:2008:CME**

[PS08]

Daniel Peterseim and Stefan A. Sauter. The composite mini element—coarse mesh computation of Stokes flows on complicated domains. *SIAM Journal on Numerical Analysis*, 46(6):3181–3206, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Pawlowski:2008:IND**

[PSWS08]

Roger P. Pawlowski, Joseph P. Simonis, Homer F. Walker, and John N. Shadid. Inexact Newton dogleg methods. *SIAM Journal on Numerical Analysis*, 46(4):2112–2132, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [PU99] René Pinnau and Andreas Unterreiter. The stationary current-voltage characteristics of the quantum drift-diffusion model. *SIAM Journal on Numerical Analysis*, 37(1):211–245, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34103>.
- [PW99a] Luca F. Pavarino and Olof B. Widlund. Iterative substructuring methods for spectral element discretizations of elliptic systems I: Compressible linear elasticity. *SIAM Journal on Numerical Analysis*, 37(2):353–374, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32824>.
- [PW99b] Luca F. Pavarino and Olof B. Widlund. Iterative substructuring methods for spectral element discretizations of elliptic systems. II: Mixed methods for linear elasticity and Stokes flow. *SIAM Journal on Numerical Analysis*, 37(2):375–402, April 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33309>.
- [PW06a] Joseph E. Pasciak and Yanqiu Wang. A multigrid preconditioner for the mixed formulation of linear plane elasticity. *SIAM Journal on Numerical Analysis*, 44(2):478–493, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [PW06b] Jörg Peters and Xiaobin Wu. On the local linear independence of generalized subdivision functions. *SIAM Journal on Numerical Analysis*, 44(6):2389–2407, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [PW09] Leszek Plaskota and Grzegorz W. Wasilkowski. Uniform approximation of piecewise  $r$ -smooth and globally continuous functions. *SIAM Journal on Numerical Analysis*, 47(1):762–785, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [PY04] Jong-Shi Pang and Thomas P.-Y. Yu. Continuous  $M$ -estimators and their interpolation by polynomials. *SIAM Journal on Numerical Analysis*, 42(3):997–1017, June 2004. CODEN SJNAAM. ISSN

- 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41222>. [QVZ01]
- [PYD06] **Pani:2006:LBE**  
 Amiya K. Pani, Jin Yun Yuan, and Pedro D. Damázio. On a linearized backward Euler method for the equations of motion of Oldroyd fluids of order one. *SIAM Journal on Numerical Analysis*, 44(2):804–825, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [PZ04] **Plexousakis:2004:CAH**  
 Michael Plexousakis and Georgios E. Zouraris. On the construction and analysis of high order locally conservative finite volume-type methods for one-dimensional elliptic problems. *SIAM Journal on Numerical Analysis*, 42(3):1226–1260, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40630>.
- [QS08] **Qiu:2008:CGT**  
 Jing-Mei Qiu and Chi-Wang Shu. Convergence of Godunov-type schemes for scalar conservation laws under large time steps. *SIAM Journal on Numerical Analysis*, 46(5):2211–2237, ??? 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Quarteroni:2001:MMN**  
 Alfio Quarteroni, Alessandro Veneziani, and Paolo Zunino. Mathematical and numerical modeling of solute dynamics in blood flow and arterial walls. *SIAM Journal on Numerical Analysis*, 39(5):1488–1511, October 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36971>.
- [QX06] **Qin:2006:PRT**  
 Lizhen Qin and Xuejun Xu. On a parallel robin-type nonoverlapping domain decomposition method. *SIAM Journal on Numerical Analysis*, 44(6):2539–2558, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [QZZ07] **Qian:2007:FSM**  
 Jianliang Qian, Yong-Tao Zhang, and Hong-Kai Zhao. Fast sweeping methods for eikonal equations on triangular meshes. *SIAM Journal on Numerical Analysis*, 45(1):83–107, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Rab00] **Rabut:2000:MDD**  
 Christophe Rabut. Multivariate divided differences with simple knots. *SIAM Journal on Numerical Analysis*, 38(4):1294–1311, August 2000. CODEN SJNAAM. ISSN

- 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35104>.
- Raffetto:2005:DCE**
- [Raf05] Mirco Raffetto. Discrete compactness for edge elements in the presence of mixed boundary conditions. *SIAM Journal on Numerical Analysis*, 42(5):1818–1829, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43414>.
- Ran:2008:LSP**
- [Ran08] Zheng Ran. Lie symmetry preservation and shock-capturing methods. *SIAM Journal on Numerical Analysis*, 46(1):325–343, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Rapetti:2009:WFH**
- [RB09] Francesca Rapetti and Alain Bossavit. Whitney forms of higher degree. *SIAM Journal on Numerical Analysis*, 47(3):2369–2386, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Rahman:2008:CRF**
- [RBX08] Talal Rahman, Petter BjØrstad, and Xuejun Xu. The Crouzeix–Raviart FE on nonmatching grids with an approximate mortar condition. *SIAM Journal on Numerical Analysis*, 46(1):496–516, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Rocca:2001:NAQ**
- [RC01] Remi Rocca and Marius Cocou. Numerical analysis of quasi-static unilateral contact problems with local friction. *SIAM Journal on Numerical Analysis*, 39(4):1324–1342, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38260>.
- Rapetti:2003:DVP**
- [RD03] Francesca Rapetti and François Dubois. Discrete vector potentials for nonsimply connected three-dimensional domains. *SIAM Journal on Numerical Analysis*, 41(4):1505–1527, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41264>.
- Rebholz:2007:EHC**
- [Reb07] Leo G. Rebholz. An energy- and helicity-conserving finite element scheme for the Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 45(4):1622–1638, 2007. CODEN SJNAAM. ISSN 0036-

- 1429 (print), 1095-7170 (electronic).
- [Reu03] **Reusken:2003:CAG**  
Arnold Reusken. Convergence analysis of the Gauss-Seidel preconditioner for discretized one dimensional Euler equations. *SIAM Journal on Numerical Analysis*, 41(4):1388–1405, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40739>.
- [RF03] **Rieder:2003:SFB**  
Andreas Rieder and Adel Fardani. The semidiscrete filtered backprojection algorithm is optimal for tomographic inversion. *SIAM Journal on Numerical Analysis*, 41(3):869–892, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40564>.
- [RHA03] **Roberts:2003:ATP**  
Stephen Roberts, Markus Hegland, and Irfan Altas. Approximation of a thin plate spline smoother using continuous piecewise polynomial functions. *SIAM Journal on Numerical Analysis*, 41(1):208–234, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38329>.
- [Ric02] **Richter:2002:SFE**  
Gerard R. Richter. Stable finite element box methods for hyperbolic equations. *SIAM Journal on Numerical Analysis*, 39(5):1667–1683, October 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38656>.
- [Rie05] **Rieder:2005:INR**  
Andreas Rieder. Inexact Newton regularization using conjugate gradients as inner iteration. *SIAM Journal on Numerical Analysis*, 43(2):604–622, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60402>.
- [Rin00] **Ringhofer:2000:STD**  
Christian Ringhofer. Space-time discretization of series expansion methods for the Boltzmann transport equation. *SIAM Journal on Numerical Analysis*, 38(2):442–465, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33992>.
- [Rin01] **Ring:2001:FOS**  
Wolfgang Ring. A first-order sequential predictor-corrector regularization method for ill-posed Volterra equations. *SIAM*

- Journal on Numerical Analysis*, 38(6):2079–2102, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36209>. [RLK09]
- Ringhofer:2003:MSD**
- [Rin03] Christian Ringhofer. A mixed spectral-difference method for the steady state Boltzmann–Poisson system. *SIAM Journal on Numerical Analysis*, 41(1):64–89, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38958>.
- Rindler:2009:ARI**
- [Rin09] Filip Rindler. Approximation of rate-independent optimal control problems. *SIAM Journal on Numerical Analysis*, 47(5):3884–3909, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Risch:2001:CAR**
- [Ris01] Uwe Risch. Convergence analysis of the residual free bubble method for bilinear elements. *SIAM Journal on Numerical Analysis*, 39(4):1366–1379, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38014>. [Rou00]
- Ryu:2009:FOS**
- Soorok Ryu, Hyung-Chun Lee, and Sang Dong Kim. First-order system least-squares methods for an optimal control problem by the Stokes flow. *SIAM Journal on Numerical Analysis*, 47(2):1524–1545, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Rodenkirchen:2007:MCR**
- [Rod07] Juergen Rodenkirchen. Maximum  $L^2$ -convergence rates of the Crank–Nicolson scheme to the Stokes initial value problem. *SIAM Journal on Numerical Analysis*, 45(2):484–499, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Rossler:2009:SOR**
- [Röß09] Andreas Rößler. Second order Runge–Kutta methods for Itô stochastic differential equations. *SIAM Journal on Numerical Analysis*, 47(3):1713–1738, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Roux:2000:NSN**
- Marie-Noëlle Le Roux. Numerical solution of nonlinear reaction diffusion processes. *SIAM Journal on Numerical Analysis*, 37(5):1644–1656, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38014>.

[//epubs.siam.org/sam-bin/dbq/article/33599](http://epubs.siam.org/sam-bin/dbq/article/33599).

**Rathinam:2002:DIU**

- [RP02] Muruhan Rathinam and Linda R. Petzold. Dynamic iteration using reduced order models: A method for simulation of large scale modular systems. *SIAM Journal on Numerical Analysis*, 40(4):1446–1474, August 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39049>. [RS00]

**Rathinam:2003:NLP**

- [RP03] Muruhan Rathinam and Linda R. Petzold. A new look at proper orthogonal decomposition. *SIAM Journal on Numerical Analysis*, 41(5):1893–1925, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38904>. [RS04]

**Radu:2004:OCE**

- [RPK04] Florin Radu, Iuliu Sorin Pop, and Peter Knabner. Order of convergence estimates for an Euler implicit, mixed finite element discretization of Richards' equation. *SIAM Journal on Numerical Analysis*, 42(4):1452–1478, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33599>. [RS06]

[//epubs.siam.org/sam-bin/dbq/article/40522](http://epubs.siam.org/sam-bin/dbq/article/40522).

**Rieder:2000:AIA**

- Andreas Rieder and Thomas Schuster. The approximate inverse in action with an application to computerized tomography. *SIAM Journal on Numerical Analysis*, 37(6):1909–1929, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34761>.

**Ruuth:2004:HOS**

- Steven J. Ruuth and Raymond J. Spiteri. High-order strong-stability-preserving Runge-Kutta methods with downwind-biased spatial discretizations. *SIAM Journal on Numerical Analysis*, 42(3):974–996, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41928>.

**Riviere:2006:DGF**

- Béatrice Rivière and Simon Shaw. Discontinuous Galerkin finite element approximation of nonlinear non-Fickian diffusion in viscoelastic polymers. *SIAM Journal on Numerical Analysis*, 44(6):2650–2670, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- Repin:2004:PED**
- [RSS04] Sergey Repin, Stefan Sauter, and Anton Smolianski. A posteriori estimation of dimension reduction errors for elliptic problems on thin domains. *SIAM Journal on Numerical Analysis*, 42(4):1435–1451, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60238>.
- Repin:2007:TSP**
- [RSS07] Sergey Repin, Stefan Sauter, and Anton Smolianski. Two-sided A posteriori error estimates for mixed formulations of elliptic problems. *SIAM Journal on Numerical Analysis*, 45(3):928–945, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Ringhofer:2001:MMS**
- [RSZ01] C. Ringhofer, C. Schmeiser, and A. Zwirchmayr. Moment methods for the semiconductor Boltzmann equation on bounded position domains. *SIAM Journal on Numerical Analysis*, 39(3):1078–1095, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33598>.
- Rosch:2006:OCS**
- [RV06] Arnd Rösch and Boris Vexler. Optimal control of the Stokes equations: A priori error analysis for finite element discretization with postprocessing. *SIAM Journal on Numerical Analysis*, 44(5):1903–1920, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Rjasanow:2000:TTC**
- [RW00] Sergej Rjasanow and Wolfgang Wagner. A temperature time counter scheme for the Boltzmann equation. *SIAM Journal on Numerical Analysis*, 37(6):1800–1819, December 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33690>.
- Reddy:2005:ACD**
- [RW05] S. C. Reddy and J. A. C. Weideman. The accuracy of the Chebyshev differencing method for analytic functions. *SIAM Journal on Numerical Analysis*, 42(5):2176–2187, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60328>.
- Rjasanow:2007:TSE**
- [RW07] Sergej Rjasanow and Wolfgang Wagner. Time splitting error in DSMC schemes for the spatially homogeneous inelastic Boltzmann equation. *SIAM Journal on Numerical Analysis*, 45(1):54–67, ??? 2007. CO-



- DEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [RWG01] **Riviere:2001:PEE**  
 Béatrice Rivière, Mary F. Wheeler, and Vivette Girault. A priori error estimates for finite element methods based on discontinuous approximation spaces for elliptic problems. *SIAM Journal on Numerical Analysis*, 39(3):902–931, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37174>.
- [RWY07] **Russell:2007:SCV**  
 Thomas F. Russell, Mary F. Wheeler, and Ivan Yotov. Superconvergence for control-volume mixed finite element methods on rectangular grids. *SIAM Journal on Numerical Analysis*, 45(1):223–235, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [RY05] **Riviere:2005:LCC**  
 Béatrice Rivière and Ivan Yotov. Locally conservative coupling of Stokes and Darcy flows. *SIAM Journal on Numerical Analysis*, 42(5):1959–1977, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42764>.
- [San00a] **Sangalli:2000:GLE**  
 Giancarlo Sangalli. Global and local error analysis for the residual-free bubbles method applied to advection-dominated problems. *SIAM Journal on Numerical Analysis*, 38(5):1496–1522, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36538>.
- [San00b] **Santos:2000:LMN**  
 Felix C. G. Santos. The linearization method for the numerical analysis of finite element solutions to quasilinear elliptic partial differential equations. *SIAM Journal on Numerical Analysis*, 38(1):227–266, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34861>.
- [San03] **Sangalli:2003:QOS**  
 Giancarlo Sangalli. Quasi optimality of the SUPG method for the one-dimensional advection-diffusion problem. *SIAM Journal on Numerical Analysis*, 41(4):1528–1542, August 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41169>.

- [San09] **Sandberg:2009:CFE**  
 Mattias Sandberg. Convergence of the forward Euler method for nonconvex differential inclusions. *SIAM Journal on Numerical Analysis*, 47(1):308–320, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Sar03] **Sarvas:2003:PIA**  
 Jukka Sarvas. Performing interpolation and antepolation entirely by Fast Fourier Transform in the 3-D multilevel fast multipole algorithm. *SIAM Journal on Numerical Analysis*, 41(6):2180–2196, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40565>.
- [Say09] **Sayas:2009:VJN**  
 Francisco-Javier Sayas. The validity of Johnson–Nédélec’s BEM–FEM coupling on polygonal interfaces. *SIAM Journal on Numerical Analysis*, 47(5):3451–3463, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SBBHP04] **Sauer-Budge:2004:CBL**  
 A. M. Sauer-Budge, J. Bonet, A. Huerta, and J. Peraire. Computing bounds for linear functionals of exact weak solutions to Poisson’s equation. *SIAM Journal on Numerical*
- [SBM01] **Schmidt:2001:NVM**  
 Jochen W. Schmidt, Marion Bastian, and Bernd Mulansky. Nonnegative volume matching by cubic  $C^1$  splines on Clough–Tocher splits. *SIAM Journal on Numerical Analysis*, 39(2):566–586, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36617>.
- [Sch00] **Schatz:2000:PEE**  
 Alfred H. Schatz. Pointwise error estimates and asymptotic error expansion inequalities for the finite element method on irregular grids: Part II. interior estimates. *SIAM Journal on Numerical Analysis*, 38(4):1269–1293, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32480>.
- [Sch02a] **Schropp:2002:GPR**  
 Johannes Schropp. Geometric properties of Runge–Kutta discretizations for index 2 differential algebraic equations. *SIAM Journal on Numerical Analysis*, 40(3):872–890, June
- Analysis*, 42(4):1610–1630, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42504>.

2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37662>.
- [Sch02b] **Schweizer:2002:STD**  
Ben Schweizer. A stable time discretization of the Stefan problem with surface tension. *SIAM Journal on Numerical Analysis*, 40(3):1184–1205, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37232>.
- [Sch05] **Schatz:2005:PFE**  
Alfred H. Schatz. Perturbations of forms and error estimates for the finite element method at a point, with an application to improved super-convergence error estimates for subspaces that are symmetric with respect to a point. *SIAM Journal on Numerical Analysis*, 42(6):2342–2365, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40813>.
- [Sch07] **Schaback:2007:CUK**  
Robert Schaback. Convergence of unsymmetric kernel-based meshless collocation methods. *SIAM Journal on Numerical Analysis*, 45(1):333–351, ??? 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Sch09] **Schaeffer:2009:HOT**  
Jack Schaeffer. Higher order time splitting for the linear Vlasov equation. *SIAM Journal on Numerical Analysis*, 47(3):2203–2223, ??? 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SD02] **Szpiro:2002:SON**  
Adam Szpiro and Paul Dupuis. Second order numerical methods for first order Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 40(3):1136–1183, June 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35704>.
- [SD05] **Sinha:2005:OEE**  
Rajen Kumar Sinha and Bhupen Deka. Optimal error estimates for linear parabolic problems with discontinuous coefficients. *SIAM Journal on Numerical Analysis*, 43(2):733–749, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60535>.
- [SD09] **Simoncini:2009:CAP**  
V. Simoncini and V. Druskin. Convergence analysis of pro-

- jection methods for the numerical solution of large Lyapunov equations. *SIAM Journal on Numerical Analysis*, 47(2):828–843, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SdS06] **Siefert:2006:PGS**  
Chris Siefert and Eric de Sturler. Preconditioners for generalized saddle-point problems. *SIAM Journal on Numerical Analysis*, 44(3):1275–1296, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SE05] **Siklosi:2005:AFO**  
Malin Siklosi and Gunilla Efraimsson. Analysis of first order errors in shock calculations in two space dimensions. *SIAM Journal on Numerical Analysis*, 43(2):672–685, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60346>.
- [Seg02] **Segura:2002:ZSF**  
Javier Segura. The zeros of special functions from a fixed point method. *SIAM Journal on Numerical Analysis*, 40(1):114–133, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38738>.
- [SEL09] **Sinha:2009:MFE**  
Rajen K. Sinha, Richard E. Ewing, and Raytcho D. Lazarov. Mixed finite element approximations of parabolic integro-differential equations with nonsmooth initial data. *SIAM Journal on Numerical Analysis*, 47(5):3269–3292, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SFNW05] **Saas:2005:FVM**  
L. Saas, I. Faille, F. Nataf, and F. Willien. Finite volume methods for domain decomposition on nonmatching grids with arbitrary interface conditions. *SIAM Journal on Numerical Analysis*, 43(2):860–890, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43405>.
- [SGM01] **Samarskii:2001:SRT**  
Alexander A. Samarskii, Ivan P. Gavriluk, and Vladimir L. Makarov. Stability and regularization of three-level difference schemes with unbounded operator coefficients in Banach spaces. *SIAM Journal on Numerical Analysis*, 39(2):708–723, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35722>.

- Seybold:2008:NAC**
- [SH08] Hansjörg Seybold and Rudolf Hilfer. Numerical algorithm for calculating the generalized Mittag–Leffler function. *SIAM Journal on Numerical Analysis*, 47(1):69–88, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Shen:2000:SES**
- [She00] Jie Shen. Stable and efficient spectral methods in unbounded domains using Laguerre functions. *SIAM Journal on Numerical Analysis*, 38(4):1113–1133, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36293>.
- Shen:2003:NDP**
- [She03] Jie Shen. A new dual-Petrov–Galerkin method for third and higher odd-order differential equations: Application to the KDV equation. *SIAM Journal on Numerical Analysis*, 41(5):1595–1619, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41027>.
- Sidi:2000:REP**
- [Sid00] Avram Sidi. The Richardson extrapolation process with a harmonic sequence of col-
- location points. *SIAM Journal on Numerical Analysis*, 37(5):1729–1746, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34013>.
- Simoncini:2005:VAM**
- [Sim05] V. Simoncini. Variable accuracy of matrix-vector products in projection methods for eigencomputation. *SIAM Journal on Numerical Analysis*, 43(3):1155–1174, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60533>.
- Siklosi:2003:EFO**
- [SK03] Malin Siklosi and Gunilla Kreiss. Elimination of first order errors in time dependent shock calculations. *SIAM Journal on Numerical Analysis*, 41(6):2131–2148, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40045>.
- Sloan:2002:CRS**
- [SKJ02] I. H. Sloan, F. Y. Kuo, and S. Joe. Constructing randomly shifted lattice rules in weighted Sobolev spaces. *SIAM Journal on Numerical Analysis*, 40(5):1650–1665, October 2002. CODEN SJNAAM.

- ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39394>. [SLS09]
- Strikwerda:1999:AFS**
- [SL99] John C. Strikwerda and Young S. Lee. The accuracy of the fractional step method. *SIAM Journal on Numerical Analysis*, 37(1):37–47, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32693>. [SM08]
- Shi:2006:USC**
- [SL06] Han-Sheng Shi and Hong-Lin Liao. Unconditional stability of corrected explicit-implicit domain decomposition algorithms for parallel approximation of heat equations. *SIAM Journal on Numerical Analysis*, 44(4):1584–1611, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [SN04]
- Sloan:2004:NIP**
- [Slo04] David M. Sloan. On the norms of inverses of pseudospectral differentiation matrices. *SIAM Journal on Numerical Analysis*, 42(1):30–48, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41454>. [Sou05]
- Shen:2009:FPM**
- Longjun Shen, Guixia Lv, and Zhijun Shen. A finite point method based on directional differences. *SIAM Journal on Numerical Analysis*, 47(3):2224–2242, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Schoombie:2008:HFI**
- S. W. Schoombie and E. Maré. High frequency induced instability in Nyström methods for the van der Pol equation. *SIAM Journal on Numerical Analysis*, 46(3):1147–1165, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Schichl:2004:ERS**
- Hermann Schichl and Arnold Neumaier. Exclusion regions for systems of equations. *SIAM Journal on Numerical Analysis*, 42(1):383–408, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41889>.
- Soussi:2005:CSM**
- Sofiane Soussi. Convergence of the supercell method for defect modes calculations in photonic crystals. *SIAM Journal on Numerical Analysis*, 43(3):1175–1201, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-

7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61687>.

[SR02]

**Serban:2002:ECS**

[SP02]

Radu Serban and Linda R. Petzold. Efficient computation of sensitivities for ordinary differential equation boundary value problems. *SIAM Journal on Numerical Analysis*, 40(1):220–232, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37687>.

**Spijker:2007:SCG**

[Spi07]

M. N. Spijker. Stepsize conditions for general monotonicity in numerical initial value problems. *SIAM Journal on Numerical Analysis*, 45(3):1226–1245, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Qian:2005:CBT**

[sQlXsJjB05]

Xiao song Qian, Cheng long Xu, Li shang Jiang, and Bao jun Bian. Convergence of the binomial tree method for American options in a jump-diffusion model. *SIAM Journal on Numerical Analysis*, 42(5):1899–1913, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40974>.

[SS00b]

**Spiteri:2002:NCO**

Raymond J. Spiteri and Steven J. Ruuth. A new class of optimal high-order strong-stability-preserving time discretization methods. *SIAM Journal on Numerical Analysis*, 40(2):469–491, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38902>.

**Schötzau:2000:TDP**

[SS00a]

Dominik Schötzau and Christoph Schwab. Time discretization of parabolic problems by the HP-version of the discontinuous Galerkin finite element method. *SIAM Journal on Numerical Analysis*, 38(3):837–875, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35239>.

**Shardlow:2000:PTE**

T. Shardlow and A. M. Stuart. A perturbation theory for ergodic Markov chains and application to numerical approximations. *SIAM Journal on Numerical Analysis*, 37(4):1120–1137, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33723>.

- Skeel:2000:NSA**
- [SS00c] Robert D. Skeel and K. Srinivas. Nonlinear stability analysis of area-preserving integrators. *SIAM Journal on Numerical Analysis*, 38(1):129–148, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34952>. [SS08]
- Simoncini:2003:FIO**
- [SS03a] Valeria Simoncini and Daniel B. Szyld. Flexible inner-outer Krylov subspace methods. *SIAM Journal on Numerical Analysis*, 40(6):2219–2239, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40107>. [SS09]
- Sun:2003:SSE**
- [SS03b] Defeng Sun and Jie Sun. Strong semismoothness of eigenvalues of symmetric matrices and its application to inverse eigenvalue problems. *SIAM Journal on Numerical Analysis*, 40(6):2352–2367, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39381>. [SST03]
- Santos:2007:FEM**
- [SS07] Juan E. Santos and Dongwoo Sheen. Finite element methods for the simulation of waves in composite saturated poroviscoelastic media. *SIAM Journal on Numerical Analysis*, 45(1):389–420, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Sanz-Serna:2008:MIM**
- J. M. Sanz-Serna. Mollified impulse methods for highly oscillatory differential equations. *SIAM Journal on Numerical Analysis*, 46(2):1040–1059, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Schoberl:2009:MMS**
- Joachim Schöberl and Rolf Stenberg. Multigrid methods for a stabilized Reissner–Mindlin plate formulation. *SIAM Journal on Numerical Analysis*, 47(4):2735–2751, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Schötzau:2003:MHD**
- Dominik Schötzau, Christoph Schwab, and Andrea Toselli. Mixed *hp*-DGFEM for incompressible flows. *SIAM Journal on Numerical Analysis*, 40(6):2171–2194, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39912>.



- [SST05] **SanMartin:2005:CLG**  
 Jorge San Martín, Jean-François Scheid, Takéo Takahashi, and Marius Tucsnak. Convergence of the Lagrange–Galerkin method for the equations modelling the motion of a fluid-rigid system. *SIAM Journal on Numerical Analysis*, 43(4):1536–1571, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43816>.
- [SSZ07] Jun Shen, Chi-Wang Shu, and Mengping Zhang. High resolution schemes for a hierarchical size-structured model. *SIAM Journal on Numerical Analysis*, 45(1):352–370, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ST03] **Stynes:2003:SCD**  
 Martin Stynes and Lutz Tobiska. The SDFEM for a convection-diffusion problem with a boundary layer: Optimal error analysis and enhancement of accuracy. *SIAM Journal on Numerical Analysis*, 41(5):1620–1642, October 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40472>.
- [ST06] **Strohmer:2006:FRM**  
 Thomas Strohmer and Jared Tanner. Fast reconstruction methods for bandlimited functions from periodic nonuniform sampling. *SIAM Journal on Numerical Analysis*, 44(3):1073–1094, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [ST07] **Schmelzer:2007:CGF**  
 Thomas Schmelzer and Lloyd N. Trefethen. Computing the gamma function using contour integrals and rational approximations. *SIAM Journal on Numerical Analysis*, 45(2):558–571, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Sta05] **Starke:2005:FOS**  
 Gerhard Starke. A first-order system least squares finite element method for the shallow water equations. *SIAM Journal on Numerical Analysis*, 42(6):2387–2407, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43812>.
- [Sta07] **Starke:2007:ALS**  
 Gerhard Starke. An adaptive least-squares mixed finite element method for elastoplasticity. *SIAM Journal on Numerical Analysis*, 45(1):371–388, 2007. CODEN

SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Steinbach:2000:MAB**

[Ste00] O. Steinbach. Mixed approximations for boundary elements. *SIAM Journal on Numerical Analysis*, 38(2):401–413, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35308>.

**Stevenson:2003:ASO**

[Ste03] Rob Stevenson. Adaptive solution of operator equations using wavelet frames. *SIAM Journal on Numerical Analysis*, 41(3):1074–1100, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40798>.

**Stevenson:2005:OAF**

[Ste05] Rob Stevenson. An optimal adaptive finite element method. *SIAM Journal on Numerical Analysis*, 42(5):2188–2217, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42508>.

**Stevenson:2007:CWB**

[Ste07] Rob Stevenson. Composite wavelet bases with extended stability and cancellation properties. *SIAM Journal on*

*Numerical Analysis*, 45(1):133–162, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Stolk:2009:FML**

[Sto09] Christiaan C. Stolk. A fast method for linear waves based on geometrical optics. *SIAM Journal on Numerical Analysis*, 47(2):1168–1194, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Samelson:2003:SPP**

[STWW03] Roger Samelson, Roger Temam, Cheng Wang, and Shouhong Wang. Surface pressure Poisson equation formulation of the primitive equations: Numerical schemes. *SIAM Journal on Numerical Analysis*, 41(3):1163–1194, June 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39628>.

**Sharp:2000:SEE**

[SV00] P. W. Sharp and J. H. Verner. Some extended explicit Bel'tyukov pairs for Volterra integral equations of the second kind. *SIAM Journal on Numerical Analysis*, 38(2):347–359, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31280>.

**Sachs:2002:ALS**

- [SV02] E. Sachs and S. Volkwein. Augmented Lagrange–SQP methods with Lipschitz-continuous Lagrange multiplier updates. *SIAM Journal on Numerical Analysis*, 40(1):233–253, February 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34821>.

**Sethian:2003:OUM**

- [SV03] James A. Sethian and Alexander Vladimirsky. Ordered upwind methods for static Hamilton–Jacobi equations: Theory and algorithms. *SIAM Journal on Numerical Analysis*, 41(1):325–363, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39274>.

**Saleri:2005:PCA**

- [SV05] F. Saleri and A. Veneziani. Pressure correction algebraic splitting methods for the incompressible Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 43(1):174–194, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43542>.

**Sarkis:2008:CAN**

- [SV08] Marcus Sarkis and Henrique Versieux. Convergence analysis for the numerical boundary corrector for elliptic equations with rapidly oscillating coefficients. *SIAM Journal on Numerical Analysis*, 46(2):545–576, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Sommese:2001:NDS**

- [SVW01] Andrew J. Sommese, Jan Verschelde, and Charles W. Wampler. Numerical decomposition of the solution sets of polynomial systems into irreducible components. *SIAM Journal on Numerical Analysis*, 38(6):2022–2046, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37254>.

**Sommese:2002:SFA**

- [SVW02] Andrew J. Sommese, Jan Verschelde, and Charles W. Wampler. Symmetric functions applied to decomposing solution sets of polynomial systems. *SIAM Journal on Numerical Analysis*, 40(6):2026–2046, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39710>.

- [SVW04] Andrew J. Sommesse, Jan Verschelde, and Charles W. Wampler. Homotopies for intersecting solution components of polynomial systems. *SIAM Journal on Numerical Analysis*, 42(4):1552–1571, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43046>.
- [SW04a] Andrew J. Sommesse, Jan Verschelde, and Charles W. Wampler. Homotopies for intersecting solution components of polynomial systems. *SIAM Journal on Numerical Analysis*, 42(4):1552–1571, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43046>.
- [SW00] Simon Shaw and J. R. Whiteman. Numerical solution of linear quasistatic hereditary viscoelasticity problems. *SIAM Journal on Numerical Analysis*, 38(1):80–97, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33785>.
- [SW03] Alfred H. Schatz and Lars B. Wahlbin. Pointwise error estimates for differences in piecewise linear finite element approximations. *SIAM Journal on Numerical Analysis*, 41(6):2149–2160, December 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40592>.
- [SW04b] Bernhard A. Schmitt and Rüdiger Weiner. Parallel two-step  $W$ -methods with peer variables. *SIAM Journal on Numerical Analysis*, 42(1):265–282, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41105>.
- [SW05a] Jie Shen and Li-Lian Wang. Error analysis for mapped Legendre spectral and pseudospectral methods. *SIAM Journal on Numerical Analysis*, 42(1):326–349, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42206>.
- [SW05b] Jie Shen and Li-Lian Wang. Spectral approximation of the Helmholtz equation with high wave numbers. *SIAM Journal on Numerical Analysis*, 43(2):623–644, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60733>.
- [SW05b] Shuyu Sun and Mary F. Wheeler. Symmetric and

**Sommese:2004:HIS****Schmitt:2004:PTS****Shen:2004:EAM****Shaw:2000:NSL****Shen:2005:SAH****Schatz:2003:PEE****Sun:2005:SND**

- nonsymmetric discontinuous Galerkin methods for reactive transport in porous media. *SIAM Journal on Numerical Analysis*, 43(1):195–219, February 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41708>.
- [SWL09] **Shen:2007:ASG**  
Jie Shen and Li-Lian Wang. Analysis of a spectral-Galerkin approximation to the Helmholtz equation in exterior domains. *SIAM Journal on Numerical Analysis*, 45(5):1954–1978, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SW07] **Shen:2009:TSE**  
Jie Shen, Li-Lian Wang, and Huiyuan Li. A triangular spectral element method using fully tensorial rational basis functions. *SIAM Journal on Numerical Analysis*, 47(3):1619–1650, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SW09] **Salomon:2008:ECA**  
O. Steinbach and M. Windisch. Modified combined field integral equations for electromagnetic scattering. *SIAM Journal on Numerical Analysis*, 47(2):1149–1167, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SWW08] **Sun:2000:SCD**  
O. Steinbach and M. Windisch. Modified combined field integral equations for electromagnetic scattering. *SIAM Journal on Numerical Analysis*, 47(2):1149–1167, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [SWB<sup>+</sup>04] **Steidl:2004:ESW**  
Gabriele Steidl, Joachim Weickert, Thomas Brox, Pavel Mrázek, and Martin Welk. On the equivalence of soft wavelet shrinkage, total variation diffusion, total variation regularization, and SIDs. *SIAM Journal on Numerical Analysis*, 42(2):686–713, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42242>.
- [SY00] **Sun:2000:SCD**  
Weiwei Sun and Guangwei Yuan. Stability condition for difference schemes for parabolic systems. *SIAM Journal on Numerical Analysis*, 38(2):548–555, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34818>.

- [Sze04] **Szeftel:2004:DAB**  
 Jérémie Szeftel. Design of absorbing boundary conditions for Schrödinger equations in  $\mathbf{R}^d$ . *SIAM Journal on Numerical Analysis*, 42(4):1527–1551, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41834>.
- [TCOZ03] **Tsai:2003:FSA**  
 Yen-Hsi Richard Tsai, Li-Tien Cheng, Stanley Osher, and Hong-Kai Zhao. Fast sweeping algorithms for a class of Hamilton–Jacobi equations. *SIAM Journal on Numerical Analysis*, 41(2):673–694, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39653>.
- [TF04] **Torrilhon:2004:CPU**  
 M. Torrilhon and M. Fey. Constraint-preserving upwind methods for multidimensional advection equations. *SIAM Journal on Numerical Analysis*, 42(4):1694–1728, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42503>.
- [Tha00] **Thatcher:2000:LSM**  
 R. W. Thatcher. A least squares method for solving bi-harmonic problems. *SIAM Journal on Numerical Analysis*, 38(5):1523–1539, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33538>.
- [Tha06] **Thalhammer:2006:FOC**  
 Mechthild Thalhammer. A fourth-order commutator-free exponential integrator for nonautonomous differential equations. *SIAM Journal on Numerical Analysis*, 44(2):851–864, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Tha08] **Thalhammer:2008:HOE**  
 Mechthild Thalhammer. High-order exponential operator splitting methods for time-dependent Schrödinger equations. *SIAM Journal on Numerical Analysis*, 46(4):2022–2038, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [THBS09] **Tavazoei:2009:SPA**  
 Mohammad Saleh Tavazoei, Mohammad Haeri, Sadegh Bolouki, and Milad Siami. Stability preservation analysis for frequency-based methods in numerical simulation of fractional order systems. *SIAM Journal on Numerical Analysis*, 47(1):321–338, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [ThT00] **Tang:2000:RAS**  
 Tao Tang and Zhen huan Teng. On the regularity of approximate solutions to conservation laws with piecewise smooth solutions. *SIAM Journal on Numerical Analysis*, 38(5):1483–1495, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36407>.
- [Thü08] **Thummler:2008:NAR**  
 Vera Thümmler. Numerical approximation of relative equilibria for equivariant PDEs. *SIAM Journal on Numerical Analysis*, 46(6):2978–3005, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Tid02] **Tidriri:2002:CAT**  
 M. Tidriri. Convergence analysis of a transmission algorithm for convection-diffusion problems. *SIAM Journal on Numerical Analysis*, 40(2):451–468, April 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38284>.
- [TJ00] **Takac:2000:NED**  
 Peter Takác and Ansgar Jüngel. A nonstiff Euler discretization of the complex Ginzburg–Landau equation in one space dimension. *SIAM Journal on Numerical Analysis*, 38(2):681–698, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33285>.
- [TK01] **Toselli:2001:FDD**  
 Andrea Toselli and Axel Klawonn. A FETI domain decomposition method for edge element approximations in two dimensions with discontinuous coefficients. *SIAM Journal on Numerical Analysis*, 39(3):932–956, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36137>.
- [Tod06] **Todor:2006:REC**  
 Radu Alexandru Todor. Robust eigenvalue computation for smoothing operators. *SIAM Journal on Numerical Analysis*, 44(2):865–878, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Tow00] **Towers:2000:CDS**  
 John D. Towers. Convergence of a difference scheme for conservation laws with a discontinuous flux. *SIAM Journal on Numerical Analysis*, 38(2):681–698, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33285>.

- [//epubs.siam.org/sam-bin/dbq/article/36366](http://epubs.siam.org/sam-bin/dbq/article/36366).  
**Towers:2001:DSC**  
 [Tow01] John D. Towers. A difference scheme for conservation laws with a discontinuous flux: The nonconvex case. *SIAM Journal on Numerical Analysis*, 39(4):1197–1218, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37497>.  
**Toselli:2005:DPF**  
 [TV05] Andrea Toselli and Xavier Vasseur. Dual-primal FETI algorithms for edge element approximations: Two-dimensional  $H$  and  $P$  finite elements on shape-regular meshes. *SIAM Journal on Numerical Analysis*, 42(6):2590–2611, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43691>.  
**Tabata:2000:FEA**  
 [TT00] Masahisa Tabata and Daisuke Tagami. A finite element analysis of a linearized problem of the Navier–Stokes equations with surface tension. *SIAM Journal on Numerical Analysis*, 38(1):40–57, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32909>.  
**Tone:2006:LTS**  
 [TW06] F. Tone and D. Wirosoetisno. On the long-time stability of the implicit Euler scheme for the two-dimensional Navier–Stokes equations. *SIAM Journal on Numerical Analysis*, 44(1):29–40, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).  
**Tang:2003:AMM**  
 [TT03] Huazhong Tang and Tao Tang. Adaptive mesh methods for one- and two-dimensional hyperbolic conservation laws. *SIAM Journal on Numerical Analysis*, 41(2):487–515, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38437>.  
**Tang:2007:CDD**  
 [TW07] Huazhong Tang and Gerald Warnecke. On convergence of a domain decomposition method for a scalar conservation law. *SIAM Journal on Numerical Analysis*, 45(4):1453–1471, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).  
**Taylor:2007:CFA**  
 [TWB07] Mark A. Taylor, Beth A. Wingate, and Len P. Bos. A cardinal function algorithm for computing multivariate quadrature points. *SIAM Journal*



on *Numerical Analysis*, 45(1): 193–205, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Taylor:2000:ACF**

[TWV00] M. A. Taylor, B. A. Wingate, and R. E. Vincent. An algorithm for computing Fekete points in the triangle. *SIAM Journal on Numerical Analysis*, 38(5):1707–1720, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33724>.

**Tang:1999:NAG**

[TZ99] H. S. Tang and T. Zhou. On nonconservative algorithms for grid interfaces. *SIAM Journal on Numerical Analysis*, 37(1):173–193, February 1999. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31210>.

**Ushijima:2000:CCA**

[UY00] TaKeo K. Ushijima and Shigetoshi Yazaki. Convergence of a crystalline algorithm for the motion of a closed convex curve by a power of curvature  $V = K^A$ . *SIAM Journal on Numerical Analysis*, 37(2):500–522, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33013>.

[//epubs.siam.org/sam-bin/dbq/article/33013](http://epubs.siam.org/sam-bin/dbq/article/33013).

**VanCrieelingen:2005:LAA**

[Van05] S. Van Crieelingen. A linear algebraic analysis of diffusion synthetic acceleration for three-dimensional transport equations. *SIAM Journal on Numerical Analysis*, 43(5):2034–2059, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39844>.

**Vasseur:2001:EPS**

[Vas01] Alexis Vasseur. Existence and properties of semidiscrete shock profiles for the isentropic gas dynamic system with  $\gamma = 3$ . *SIAM Journal on Numerical Analysis*, 38(6):1886–1901, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35571>.

**vanderVegt:2007:EAC**

[vdVIB07] Jaap J. W. van der Vegt, Ferenc Izsák, and Onno Bokhove. Error analysis of a continuous-discontinuous Galerkin finite element method for generalized 2D vorticity dynamics. *SIAM Journal on Numerical Analysis*, 45(4):1349–1369, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [Vee01] **Veese:2001:ERP**  
 Andreas Veese. Efficient and reliable A posteriori error estimators for elliptic obstacle problems. *SIAM Journal on Numerical Analysis*, 39(1):146–167, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37081>.
- [Ven09] **Veneziani:2009:NCS**  
 Alessandro Veneziani. A note on the consistency and stability properties of Yosida fractional step schemes for the unsteady Stokes equations. *SIAM Journal on Numerical Analysis*, 47(4):2838–2843, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Ver05a] **Verfurth:2005:RPEb**  
 R. Verfürth. Robust A posteriori error estimates for non-stationary convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 43(4):1783–1802, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60427>.
- [Ver05b] **Verfurth:2005:RPEa**  
 R. Verfürth. Robust A posteriori error estimates for stationary convection-diffusion equations. *SIAM Journal on Numerical Analysis*, 43(4):1766–1782, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60426>.
- [Ver09] **Verfurth:2009:NCF**  
 R. Verfürth. A note on constant-free a posteriori error estimates. *SIAM Journal on Numerical Analysis*, 47(4):3180–3194, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Vic04] **Victoir:2004:ACF**  
 Nicolas Victoir. Asymmetric cubature formulae with few points in high dimension for symmetric measures. *SIAM Journal on Numerical Analysis*, 42(1):209–227, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40795>.
- [VO02] **Vese:2002:NMH**  
 Luminita A. Vese and Stanley J. Osher. Numerical methods for  $p$ -harmonic flows and applications to image processing. *SIAM Journal on Numerical Analysis*, 40(6):2085–2104, December 2002. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40795>.

[//epubs.siam.org/sam-bin/dbq/article/39671](http://epubs.siam.org/sam-bin/dbq/article/39671).

**Vohralik:2007:PEE**

- [Voh07] Martin Vohralík. A posteriori error estimates for lowest-order mixed finite element discretizations of convection-diffusion-reaction equations. *SIAM Journal on Numerical Analysis*, 45(4):1570–1599, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**vonPetersdorff:2003:WDP**

- [vPS03] T. von Petersdorff and C. Schwab. Wavelet discretizations of parabolic integrodifferential equations. *SIAM Journal on Numerical Analysis*, 41(1):159–180, February 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39484>.

**Vainikko:2008:SPQ**

- [VV08] Eero Vainikko and Gennadi Vainikko. A spline product quasi-interpolation method for weakly singular Fredholm integral equations. *SIAM Journal on Numerical Analysis*, 46(4):1799–1820, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Veesser:2009:EUB**

- [VV09] Andreas Veesser and Rüdiger Verfürth. Explicit upper bounds for dual norms of residuals.

*SIAM Journal on Numerical Analysis*, 47(3):2387–2405, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**VanDerZee:2006:CDG**

- [VVD06] K. G. Van Der Zee, E. H. Van Brummelen, and R. De Borst. An  $H^1(\mathcal{P}^h)$ -coercive discontinuous Galerkin formulation for the Poisson problem: 1D analysis. *SIAM Journal on Numerical Analysis*, 44(6):2671–2698, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Van:2004:TDF**

- [VW04] Tri Van and Aihua Wood. A time-domain finite element method for Maxwell's equations. *SIAM Journal on Numerical Analysis*, 42(4):1592–1609, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38742>.

**Waagan:2008:CRM**

- [Waa08] Knut Waagan. Convergence rate of monotone numerical schemes for Hamilton–Jacobi equations with weak boundary conditions. *SIAM Journal on Numerical Analysis*, 46(5):2371–2392, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [Wal05] **Walkington:2005:CDG**  
 Noel J. Walkington. Convergence of the discontinuous Galerkin method for discontinuous solutions. *SIAM Journal on Numerical Analysis*, 42(5):1801–1817, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41223>.
- [Wan00] **Wang:2000:OOE**  
 Hong Wang. An optimal-order error estimate for an ELLAM scheme for two-dimensional linear advection-diffusion equations. *SIAM Journal on Numerical Analysis*, 37(4):1338–1368, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33568>.
- [Wan01] **Wang:2001:NSP**  
 Ming Wang. On the necessity and sufficiency of the patch test for convergence of nonconforming finite elements. *SIAM Journal on Numerical Analysis*, 39(2):363–384, April 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36473>.
- [Wan07] **Wang:2007:CNM**  
 Hongyun Wang. Convergence of a numerical method for solving discontinuous Fokker-Planck equations. *SIAM Journal on Numerical Analysis*, 45(4):1425–1452, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Wan08] **Wang:2008:OOE**  
 Hong Wang. An optimal-order error estimate for a family of ELLAM-MFEM approximations to porous medium flow. *SIAM Journal on Numerical Analysis*, 46(4):2133–2152, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WB00] **Wiegmann:2000:EJI**  
 Andreas Wiegmann and Kenneth P. Bube. The explicit-jump immersed interface method: Finite difference methods for PDEs with piecewise smooth solutions. *SIAM Journal on Numerical Analysis*, 37(3):827–862, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32866>.
- [WD00] **Woodward:2000:AEM**  
 Carol S. Woodward and Clint N. Dawson. Analysis of expanded mixed finite element methods for a nonlinear parabolic equation modeling flow into variably saturated porous media. *SIAM Journal on Numerical Analysis*, 37(3):701–724, June

2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31104>.
- [Wen05] **Wendland:2005:CGC**  
Holger Wendland. On the convergence of a general class of finite volume methods. *SIAM Journal on Numerical Analysis*, 43(3):987–1002, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61299>.
- [Wen09] **Wendland:2009:DFK**  
Holger Wendland. Divergence-free kernel methods for approximating the Stokes problem. *SIAM Journal on Numerical Analysis*, 47(4):3158–3179, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Wet00] **Wetton:2000:EAP**  
Brian R. Wetton. Error analysis of pressure increment schemes. *SIAM Journal on Numerical Analysis*, 38(1):160–169, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33853>.
- [WF08] **Wang:2008:MUC**  
J. Wang and P. A. Forsyth. Maximal use of central differencing for Hamilton–Jacobi–Bellman PDEs in finance. *SIAM Journal on Numerical Analysis*, 46(3):1580–1601, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WH08] **Warburton:2008:TCN**  
T. Warburton and T. Hagstrom. Taming the CFL number for discontinuous Galerkin methods on structured meshes. *SIAM Journal on Numerical Analysis*, 46(6):3151–3180, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WJ08] **Wen:2008:EEH**  
Xin Wen and Shi Jin. The  $\ell^1$ -error estimates for a Hamiltonian-preserving scheme for the Liouville equation with piecewise constant potentials. *SIAM Journal on Numerical Analysis*, 46(5):2688–2714, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WK01] **Wohlmuth:2001:MMB**  
Barbara I. Wohlmuth and Rolf H. Krause. A multi-grid method based on the unconstrained product space for mortar finite element discretizations. *SIAM Journal on Numerical Analysis*, 39(1):192–213, February 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33853>.

- [//epubs.siam.org/sam-bin/dbq/article/36067](http://epubs.siam.org/sam-bin/dbq/article/36067).
- [WM08] Fuke Wu and Xuerong Mao. Numerical solutions of neutral stochastic functional differential equations. *SIAM Journal on Numerical Analysis*, 46(4):1821–1841, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WML03] Hua Wu, Heping Ma, and Huiyuan Li. Optimal error estimates of the Chebyshev–Legendre spectral method for solving the generalized Burgers equation. *SIAM Journal on Numerical Analysis*, 41(2):659–672, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39978>.
- [WN00] Michael Westdickenberg and Sebastian Noelle. A new convergence proof for finite volume schemes using the kinetic formulation of conservation laws. *SIAM Journal on Numerical Analysis*, 37(3):742–757, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32806>.
- [Woh00] Barbara I. Wohlmuth. A mortar finite element method using dual spaces for the Lagrange multiplier. *SIAM Journal on Numerical Analysis*, 38(3):989–1012, June 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35092>.
- [Woh05] Barbara I. Wohlmuth. A  $\mathcal{V}$ -cycle multigrid approach for mortar finite elements. *SIAM Journal on Numerical Analysis*, 42(6):2476–2495, December 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43092>.
- [Wol00] Stephen Wollman. On the approximation of the Vlasov–Poisson system by particle methods. *SIAM Journal on Numerical Analysis*, 37(4):1369–1398, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29852>.
- [WS07] Rong Wang and Raymond J. Spiteri. Linear instability of the fifth-order WENO method.

- SIAM Journal on Numerical Analysis*, 45(5):1871–1901, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36238>.
- Wang:2004:KLR** [WSD04] Xiaoqun Wang, Ian H. Sloan, and Josef Dick. On Korobov lattice rules in weighted spaces. *SIAM Journal on Numerical Analysis*, 42(4):1760–1779, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42502>.
- Weiser:2005:AMI** [WSD05] Martin Weiser, Anton Schiela, and Peter Deuffhard. Asymptotic mesh independence of Newton’s method revisited. *SIAM Journal on Numerical Analysis*, 42(5):1830–1845, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43404>.
- Wang:2001:ESM** [WSE01] Hong Wang, Xiquan Shi, and Richard E. Ewing. An EL-LAM scheme for multidimensional advection-reaction equations and its optimal-order error estimate. *SIAM Journal on Numerical Analysis*, 38(6):1846–1885, December 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36238>.
- Weideman:2006:OTC** [WT06] J. A. C. Weideman and L. N. Trefethen. Optimizing Talbot’s contours for the inversion of the Laplace transform. *SIAM Journal on Numerical Analysis*, 44(6):2342–2362, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Wohlmuth:2000:ISM** [WTW00] Barbara I. Wohlmuth, Andrea Toselli, and Olof B. Widlund. An iterative substructuring method for Raviart–Thomas vector fields in three dimensions. *SIAM Journal on Numerical Analysis*, 37(5):1657–1676, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34731>.
- Wang:2007:UEE** [WW07] Hong Wang and Kaixin Wang. Uniform estimates for Eulerian–Lagrangian methods for singularly perturbed time-dependent problems. *SIAM Journal on Numerical Analysis*, 45(3):1305–1329, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

- [WWL09] Wise:2009:ESC S. M. Wise, C. Wang, and J. S. Lowengrub. An energy-stable and convergent finite-difference scheme for the phase field crystal equation. *SIAM Journal on Numerical Analysis*, 47(3):2269–2288, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WY01] Wang:2001:SFE Junping Wang and Xiu Ye. Superconvergence of finite element approximations for the Stokes problem by projection methods. *SIAM Journal on Numerical Analysis*, 39(3):1001–1013, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37589>.
- [WY05] Wheeler:2005:PEE Mary F. Wheeler and Ivan Yotov. A posteriori error estimates for the mortar mixed finite element method. *SIAM Journal on Numerical Analysis*, 43(3):1021–1042, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43168>.
- [WY06] Wheeler:2006:MFM Mary F. Wheeler and Ivan Yotov. A multipoint flux mixed finite element method. *SIAM Journal on Numerical Analysis*, 44(5):2082–2106, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WY07] Wang:2007:NFE Junping Wang and Xiu Ye. New finite element methods in computational fluid dynamics by H(div) elements. *SIAM Journal on Numerical Analysis*, 45(3):1269–1286, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WZ04] Wang:2004:LMN Zhi-Qiang Wang and Jianxin Zhou. A local minimax-Newton method for finding multiple saddle points with symmetries. *SIAM Journal on Numerical Analysis*, 42(4):1745–1759, August 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43167>.
- [WZ05] Wang:2005:ESM Zhi-Qiang Wang and Jianxin Zhou. An efficient and stable method for computing multiple saddle points with symmetries. *SIAM Journal on Numerical Analysis*, 43(2):891–907, April 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41662>.



- [WZ07] Wu:2007:CWS Haijun Wu and Zhimin Zhang. Can we have superconvergent gradient recovery under adaptive meshes? *SIAM Journal on Numerical Analysis*, 45(4): 1701–1722, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [WZ08] Wong:2008:ABM Hoi Ying Wong and Jing Zhao. An artificial boundary method for American option pricing under the CEV model. *SIAM Journal on Numerical Analysis*, 46(4):2183–2209, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [XH05] Xu:2005:CME Xuejun Xu and R. H. W. Hoppe. On the convergence of mortar edge element methods in  $\mathbf{R}^3$ . *SIAM Journal on Numerical Analysis*, 43(3):1276–1294, June 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43809>.
- [XLC02] Xu:2002:MMM Xuejun Xu, Likang Li, and Wenbin Chen. A multigrid method for the mortar-type Morley element approximation of a plate bending problem. *SIAM Journal on Numerical Analysis*, 39(5):1712–1731, October 2002. CODEN SJNAAM.
- [XS08] Xu:2008:LDG Yan Xu and Chi-Wang Shu. A local discontinuous Galerkin method for the Camassa–Holm equation. *SIAM Journal on Numerical Analysis*, 46(4):1998–2021, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [XT06] Xu:2006:SAL Chuanju Xu and Tao Tang. Stability analysis of large time-stepping methods for epitaxial growth models. *SIAM Journal on Numerical Analysis*, 44(4): 1759–1779, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [XTH07] Xu:2007:ARA Yuan Xu, Oleg Tischenko, and Christoph Hoeschen. Approximation and reconstruction from attenuated radon projections. *SIAM Journal on Numerical Analysis*, 45(1):108–132, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- [Xu00a] Xu:2000:EMN Chuanju Xu. An efficient method for the Navier–Stokes/Euler coupled equations via a collocation approximation. *SIAM Journal on Numerical*
- ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36472>.

- [XZ05] *Analysis*, 38(4):1217–1242, August 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33392>.
- [Xu00b] **Xu:2000:ANQ**  
Xuejun Xu. On the accuracy of nonconforming quadrilateral  $Q^1$  element approximation for the Navier–Stokes problem. *SIAM Journal on Numerical Analysis*, 38(1):17–39, February 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35091>.
- [Xu03] **Xu:2003:PIU**  
Yuan Xu. Polynomial interpolation on the unit sphere. *SIAM Journal on Numerical Analysis*, 41(2):751–766, April 2003. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39946>.
- [XY07] **Xie:2007:SEP**  
Gang Xie and Thomas P.-Y. Yu. Smoothness equivalence properties of manifold-valued data subdivision schemes based on the projection approach. *SIAM Journal on Numerical Analysis*, 45(3):1200–1225, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).
- Xie:2005:NRH**  
Jianli Xie and Jun Zou. Numerical reconstruction of heat fluxes. *SIAM Journal on Numerical Analysis*, 43(4):1504–1535, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60255>.
- [YA05] **Yuste:2005:efd**  
S. B. Yuste and L. Acedo. An explicit finite difference method and a new von Neumann-type stability analysis for fractional diffusion equations. *SIAM Journal on Numerical Analysis*, 42(5):1862–1874, October 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60266>.
- [Yan05] **Yan:2005:GFE**  
Yubin Yan. Galerkin finite element methods for stochastic parabolic partial differential equations. *SIAM Journal on Numerical Analysis*, 43(4):1363–1384, August 2005. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60527>.
- [Yan06] **Yan:2006:PFE**  
Yubin Yan. Postprocessing the finite element method for semilinear parabolic problems.

- [Ye06] *SIAM Journal on Numerical Analysis*, 44(4):1681–1702, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Ye:2006:DFV**
- [YD08] Bo Yu and Bo Dong. A hybrid polynomial system solving method for mixed trigonometric polynomial systems. *SIAM Journal on Numerical Analysis*, 46(3):1503–1518, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Yu:2008:HPS**
- [yDLST06] Huo yuan Duan, Ping Lin, P. Saikrishnan, and Roger C. E. Tan. L2-projected least-squares finite element methods for the Stokes equations. *SIAM Journal on Numerical Analysis*, 44(2):732–752, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Duan:2006:LPL**
- [Ye04] Xiu Ye. A new discontinuous finite volume method for elliptic problems. *SIAM Journal on Numerical Analysis*, 42(3):1062–1072, June 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41704>. **Ye:2004:NDF**
- [yGpMT01] Ben yu Guo, He ping Ma, and Eitan Tadmor. Spectral vanishing viscosity method for nonlinear conservation laws. *SIAM Journal on Numerical Analysis*, 39(4):1254–1268, August 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36268>. **Guo:2001:SVV**
- [YH06] Rong-Xian Yue and Fred J. Hickernell. Strong tractability of quasi-Monte Carlo quadrature using nets for certain Banach spaces. *SIAM Journal on Numerical Analysis*, 44(6):2559–2583, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). **Yue:2006:STQ**
- [YS02] Jue Yan and Chi-Wang Shu. A local discontinuous Galerkin method for KdV type equations. *SIAM Journal on Numerical Analysis*, 40(2):769–791, April 2002. CODEN SJNAAM. **Yan:2002:LDG**

- ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39037>. [ZB00]
- [Yu06] Thomas Pok-Yin Yu. How data dependent is a nonlinear subdivision scheme? A case study based on convexity preserving subdivision. *SIAM Journal on Numerical Analysis*, 44(3):936–948, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Yu:2006:HDD]
- [YZ07] Xudong Yao and Jianxin Zhou. Unified convergence results on a minimax algorithm for finding multiple critical points in Banach spaces. *SIAM Journal on Numerical Analysis*, 45(3):1330–1347, 2007. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Yao:2007:UCR]
- [ZaY04] Weiying Zheng and Lung an Ying. Finite element approximations to the discrete spectrum of the Schrödinger operator with the Coulomb potential. *SIAM Journal on Numerical Analysis*, 42(1):49–74, February 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40347>. [Zheng:2004:FEA]
- [Zha08] Sheng Zhang. Analysis of finite element domain embedding methods for curved domains using uniform grids. *SIAM Journal on Numerical Analysis*, 46(6):2843–2866, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Zha:2008:AFE]
- [Zha09] Shangyou Zhang. A family of  $Q_{k+1,k} \times Q_{k,k+1}$  divergence-free finite elements on rectangular grids. *SIAM Journal on Numerical Analysis*, 47(3):2090–2107, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Zhang:2009:FDF]
- [Zho01] Aihui Zhou. An analysis of some high accuracy finite element methods for hyperbolic problems. *SIAM Journal on Numerical Analysis*, 39(3):1014–1028, June 2001. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). [Zhou:2001:ASH]
- [Zhornitskaya:2000:PPN] L. Zhornitskaya and A. L. Bertozzi. Positivity-preserving numerical schemes for lubrication-type equations. *SIAM Journal on Numerical Analysis*, 37(2):523–555, April 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33569>.

7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36289>.

**Zhuang:2008:NSA**

- [ZLAT08] P. Zhuang, F. Liu, V. Anh, and I. Turner. New solution and analytical techniques of the implicit numerical method for the anomalous subdiffusion equation. *SIAM Journal on Numerical Analysis*, 46(2):1079–1095, 2008. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Zhuang:2009:NMV**

- [ZLAT09] P. Zhuang, F. Liu, V. Anh, and I. Turner. Numerical methods for the variable-order fractional advection-diffusion equation with a nonlinear source term. *SIAM Journal on Numerical Analysis*, 47(3):1760–1781, 2009. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Zorin:2000:MAC**

- [Zor00] Denis Zorin. A method for analysis of  $C^1$ -continuity of subdivision surfaces. *SIAM Journal on Numerical Analysis*, 37(5):1677–1708, October 2000. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34263>.

**Zhang:2004:EES**

- [ZS04] Qiang Zhang and Chi-Wang Shu. Error estimates to smooth

solutions of Runge–Kutta discontinuous Galerkin methods for scalar conservation laws. *SIAM Journal on Numerical Analysis*, 42(2):641–666, April 2004. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40418>.

**Zhang:2006:EES**

- [ZS06] Qiang Zhang and Chi-Wang Shu. Error estimates to smooth solutions of Runge–Kutta discontinuous Galerkin method for symmetrizable systems of conservation laws. *SIAM Journal on Numerical Analysis*, 44(4):1703–1720, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).