A Complete Bibliography of Publications in *Journal of Computational Physics: X*

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, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: https://www.math.utah.edu/~beebe/

05 December 2023
Version 1.00

Title word cross-reference

2 [AE21]. 3 [BSD+20, FDB23, NGP+19].

2019 [Ano19e, Ano19f, Ano19g, Ano19h]. **2020** [Ano20e, Ano20f, Ano20g, Ano20h]. **2021** [Ano21e, Ano21f, Ano21g, Ano21h]. **2022** [Ano22e, Ano22f, Ano22g, Ano22h]. **2023** [Ano23b].

acceleration [Chu23]. **Active** [vLtI19, WA23]. **Adaptive** [CCFH20, HVH20, AVPK19, CACM19, FNSA19, KHAA19, MCF+21, PMWK20]. **ADM** [CCFH20]. **ADM-LTS** [CCFH20]. **ALE** [MTA23]. **ALE-ISPH** [MTA23]. **algorithm** [HGL+19, TR19]. **algorithms** [Tso19]. **alloy** [PMWK20]. **ambiguity** [ESJ22]. **amplifiers** [NGP+19]. **analysis** [RKvdM21, VLB+19]. **anisotropic** [Chu23]. **Application** [DGJT19, AE21, CHMP23, HOL19, WL19]. **applications** [HGL+19, vLtI19]. **applied** [KMP+20]. **approach** [CBS20, DDC23, NGP+19, WJNH19]. **approaches** [VOdLL19]. **aqueous** [SPNSB19]. **arbitrarily** [DKKEB20].

arbitrary [EDvW20a, EDvW20b, TR19]. **arising** [LAH22]. **arithmetic** [FAA20]. **arithmetic-average** [FAA20]. **artificial** [BHL22]. **artificial-viscosity** [BHL22]. **assignment** [BHL22]. **average** [FAA20]. **axisymmetric** [WPIJ20].

Back [WL19]. **based** [BHL22, LCK19, LMN+20, MTA23, MCF+21]. **bases** [AHS+19]. **basis** [Chu23]. **Bayesian** [BE22]. **binary** [PMWK20]. **blocks** [Chu23]. **Board** [Ano19a, Ano19b, Ano19c, Ano19d, Ano20a, Ano20b, Ano20c, Ano20d, Ano21a, Ano21b, Ano21c, Ano21d, Ano22a, Ano22b, Ano22c, Ano22d, Ano23a]. **bodies** [DKKEB20]. **Boltzmann** [LYH19]. **bottom** [FP20]. **boundaries** [HOL19]. **boundary** [HR20, MTA23]. **bounded** [CP23]. **brain** [RMPA20]. **bubbly** [KMP+20].

Cahn [CWWW19]. **calculus** [LVB+19, VLB+19]. **capture** [KG20]. **capturing** [ZP23]. **cardiac** [Chu23]. **Carlo** [PRB23, SP19]. **Cartesian** [EDvW20b, VOdLL19]. **Cartesian-grid** [VOdLL19]. **Cell** [FDB23, GKHG23, LMN+20, MCF+21, FDB22]. **centred** [HGL+19]. **charged** [WPIJ20]. **chemical** [SPNSB19]. **Comparisons** [VOdLL19]. **compensation** [WL19]. **compressible** [CP23, CFC+20, VOdLL19, WWGS21]. **Computational** [BSD+20, WA23]. **Computing** [LCK19]. **concurrent** [RKvdM21]. **condition** [MTA23]. **conditional** [PDF19]. **conditions** [HR20]. **conduction** [Chu23]. **conductivity** [DGJT19]. **conformal** [DDC23]. **conformally** [FNSA19]. **Connecting** [SPH+20]. **Consecutive** [Mar21]. **conservation** [DGJT19, KHAA19]. **conservative** [UkM19]. **considerations** [HOL19]. **constitutive** [RKvdM21]. **construction** [RKvdM21]. **continuous** [VCSSNP19]. **continuum** [CBS20]. **convection** [WWGS21]. **convergence** [XP21]. **coordinates** [LVB+19, VLB+19]. **Corrected** [MTA23, GORV21]. **correction** [WL19]. **counterpart** [DGJT19]. **coupling** [SP19, WJNH19]. **crystals** [MMR20, VCSSNP19]. **Cubic** [Mar21]. **curvature** [EDvW20b]. **curved** [Chu23]. **cut** [AE21].

D [FDB23, NGP+19, AE21, BSD+20]. **data** [BKTZ19, BE22]. **deep** [BE22]. **defects** [MMR20]. **deformable** [HOL19]. **dense** [KMP+20]. **density** [MTA23, SPH+20]. **density-based** [MTA23]. **derivations** [VLB+19]. **derivatives** [AHS+19]. **design** [VCSSNP19]. **detectors** [PRB23]. **deterministic** [DGJT19]. **difference** [LLR21]. **differential** [BE22]. **differentiation** [Dub19]. **dilute** [EDvW20a]. **dimensional** [Del19, DDC23, PDF19, WPIJ20]. **direct** [JLZ19, SP19]. **Discontinuous** [ZP23, CACM19, CFC+20, GKL+19, TGC19]. **discovery** [BE22]. **discrete** [WWGS21]. **discretization** [HR20, LLR21]. **dissipations** [UkM19]. **Divergence** [FNSA19]. **Divergence-free** [FNSA19]. **DNS** [CP23]. **domains** [ABS19, HR20]. **DPG** [NGP+19]. **drift** [HSvL20]. **driven**

[CHMP23]. **dynamic** [HGL+19, HVH20]. **dynamics** [BSD+20, BHL22, LCK19, SPH+20, WA23]. **dynamos** [CDRT20].

eddy [GKL+19]. **Editorial** [Abg19, Abg21, Ano19a, Ano19b, Ano19c, Ano19d, Ano20a, Ano20b, Ano20c, Ano20d, Ano21a, Ano21b, Ano21c, Ano21d, Ano22a, Ano22b, Ano22c, Ano22d, Ano23a]. **EEG** [RMPA20]. **Efficient** [BKTZ19, GKHG23, WJNH19]. **electric** [Chu23, WPIJ20]. **electromagnetic** [BKTZ19]. **element** [AE21, AVPK19, GKL+19, XP21, ZP23]. **Elliptical** [FDB23, FDB22]. **Energy** [HOL19, AVPK19, CWWW19, SPH+20]. **energy-density** [SPH+20]. **ENO** [HM21]. **Ensemble** [RBMM23a, RBMM23b]. **EPIC** [FDB23, FDB22]. **equal** [HSvL20]. **equal-weights** [HSvL20]. **equation** [BE22, CHWW20, CWWW19, Del19, HR20]. **equations** [CACM19, RMPA20, WL19]. **error** [WL19]. **escape** [KG20]. **estimate** [FAA20]. **estimation** [EDvW20b]. **Euler** [EDvW20a, KMP+20, LÖR23]. **Eulerian** [FP20]. **evaluation** [GORV21]. **examples** [LVB+19]. **expansion** [LÖR23]. **explicit** [GKL+19, HGL+19]. **extended** [PRB23]. **extrapolation** [Dub19].

factor [PBSM23]. **family** [RMPA20]. **Fast** [GORV21, PBSM23, HGL+19, KG20, SP19]. **FC** [BHL22]. **FC-based** [BHL22]. **fiber** [NGP+19]. **fibers** [RMPA20]. **field** [AVPK19, BKTZ19, LÖR23, WPIJ20]. **fields** [DGJT19, TR19]. **films** [LCK19]. **filter** [HSvL20]. **filtering** [GKL+19]. **finite** [AE21, AVPK19, HGL+19, LLR21, VOdLL19]. **flat** [FP20]. **flow** [CBS20, DDC23, LMN+20, VOdLL19, WJNH19]. **flows** [AE21, CHMP23, CP23, EDvW20a, KMP+20, WWGS21]. **fluid** [BSD+20, Mar21, XP21]. **fluid-structure** [XP21]. **fluids** [DKKEB20, WA23]. **flux** [vLtI19]. **fly** [RKvdM21]. **forecasting** [HSvL20]. **formulae** [Dub19]. **formulations** [HGL+19]. **Fort** [Del19]. **forth** [WL19]. **forward** [RMPA20]. **fractured** [HVH20]. **framework** [RBMM23a, VOdLL19]. **Frankel** [Del19]. **free** [AE21, CHMP23, FNSA19, LLR21, LAH22, WJNH19]. **free-surface** [LAH22]. **front** [UkM19]. **front-tracking** [UkM19]. **FSI** [HOL19]. **fully** [AVPK19]. **function** [EDvW20b]. **functions** [AHS+19].

gain [NGP+19]. **Galerkin** [CACM19, CFC+20, TGC19, VCSSNP19, ZP23]. **gas** [LYH19, WWGS21]. **general** [Mar21]. **geometric** [Chu23, vLtI19]. **geometry** [GKHG23]. **geothermal** [HVH20]. **glacier** [AE21]. **GPU** [LCK19, SP19]. **GPU-based** [LCK19]. **grid** [CP23, MCF+21, TGC19, VOdLL19]. **grid-based** [MCF+21]. **grids** [EDvW20b].

heat [LYH19, SP19]. **Height** [EDvW20b]. **Height-function** [EDvW20b]. **Heisenberg** [LÖR23]. **Heterogeneous**

[SPH+20, ABS19, CCFH20, DGJT19]. **Hierarchical** [ESJ22, PBSM23]. **High** [FP20, CACM19, HM21, SPH+20, VOdLL19]. **High-Order** [FP20, VOdLL19]. **high-resolution** [HM21]. **highly** [DKKEB20]. **Hilliard** [CWWW19]. **HLL** [FAA20]. **HLL-type** [FAA20]. **homogeneous** [CHWW20]. **hp}** [CACM19]. **hp}-adaptive** [CACM19]. **Hybrid** [HM21, LYH19]. **hybridized** [CFC+20]. **Hydrodynamics** [DKKEB20]. **hyperbolic** [KHAA19, PDF19, WL19].

ice [LAH22]. **ice-sheet** [LAH22]. **II** [LVB+19, RBMM23b]. **Implementation** [LVB+19, SP19]. **Implicit** [CFC+20, HSvL20, LMN+20]. **improved** [WWGS21]. **incompressible** [CACM19, HGL+19, VOdLL19]. **inconsistency** [FAA20]. **Increasing** [LAH22]. **information** [BKTZ19]. **inhomogeneous** [TR19]. **integral** [RMPA20]. **integration** [CDRT20]. **interaction** [SPNSB19, XP21]. **interface** [Mar21]. **interpolation** [Mar21]. **invariants** [Del19]. **inverse** [ESJ22, JLZ19]. **irradiance** [PBSM23]. **Isospectral** [ABS19]. **ISPH** [MTA23]. **Iterative** [Mar21].

Jacobi [LVB+19, VLB+19]. **January** [Ano19e, Ano20e, Ano21e, Ano22e]. **June** [Ano19f, Ano20f, Ano21f, Ano22f].

kinematic [CDRT20]. **kinetic** [SPH+20, WWGS21].

laden [EDvW20a]. **Lagrange** [EDvW20a, KMP+20]. **Lagrangian** [FP20, HGL+19, SPNSB19]. **Landau** [CHWW20]. **Laplace** [HR20]. **large** [GKL+19, KMP+20, LCK19]. **laser** [CHMP23, NGP+19]. **lattice** [LYH19]. **laws** [DGJT19, KHAA19]. **layer** [GORV21]. **leapfrog** [WPIJ20]. **learning** [BE22, RKvdM21]. **linear** [AVPK19, WL19]. **liquid** [MMR20]. **local** [KHAA19, LMN+20]. **localized** [BHL22]. **locally** [GORV21]. **locally-corrected** [GORV21]. **logarithmic** [CWWW19]. **low** [PBSM23]. **low-rank** [PBSM23]. **LTS** [CCFH20].

machine [RKvdM21]. **magnetic** [TR19, WPIJ20]. **magnetohydrodynamics** [CFC+20, FNSA19]. **mapping** [DDC23]. **March** [Ano19g, Ano20g, Ano21g, Ano22g]. **Massively** [HSvL20]. **Mathematical** [VLB+19]. **matrices** [PBSM23]. **matter** [SPH+20]. **Maxwell** [NGP+19, TGC19, WL19]. **mechanical** [RKvdM21]. **mechanism** [PRB23]. **media** [CCFH20, CBS20, LMN+20, WJNH19]. **melting** [CHMP23]. **mesh** [EDvW20a, MMR20, PMWK20]. **mesh-spacing** [EDvW20a]. **meshes** [FNSA19, Tso19, vLtI19]. **method** [AE21, AVPK19, CHWW20, CACM19, FP20, FNSA19, FDB22, FDB23, GKL+19, HOL19, HM21, LYH19, LLR21, LMN+20, MMR20, PDF19, SPNSB19, SPH+20, UkM19, VCSSNP19, WL19, ZP23]. **methodology** [XP21]. **methods** [CFC+20, GORV21, JLZ19, LLR21, TGC19]. **micro** [CBS20]. **micro-continuum** [CBS20]. **missing** [UkM19]. **mixed** [FP20].

Modal [GKL+19]. **model** [KMP+20, WA23]. **modeling** [CBS20, RMPA20, WJNH19]. **Modelling** [PMWK20, AE21, AVPK19, DDC23, EDvW20a, MMR20]. **models** [RKvdM21]. **molecular** [SPH+20]. **moments** [PDF19]. **Monte** [SP19, PRB23]. **moving** [FNSA19, MMR20, vLtI19]. **multilevel** [CCFH20, HVH20]. **Multiphase** [CBS20, LMN+20]. **multipole** [GORV21]. **multiresolution** [KHAA19]. **multiscale** [CBS20, RKvdM21, SPH+20, VCSSNP19]. **multiwavelet** [AHS+19].

narrow [KG20]. **Natural** [CP23, WWGS21]. **Navier** [CACM19]. **nearly** [HGL+19]. **nematic** [MMR20]. **network** [BHL22, WJNH19]. **Neumann** [HR20, MTA23]. **neural** [BHL22]. **neural-network** [BHL22]. **Newtonian** [AE21]. **noise** [MCF+21]. **noisy** [BE22]. **non** [AE21, EDvW20b]. **non-Newtonian** [AE21]. **non-uniform** [EDvW20b]. **Nonlinear** [RBMM23b, LÖR23, NGP+19]. **novel** [MTA23]. **November** [Ano23b]. **Numerical** [CHMP23, LÖR23, ABS19, CWWW19, Dub19, SP19, XP21]. **Numerically** [UkM19].

ocean [FP20, HSvL20]. **off** [PRB23]. **On-the-fly** [RKvdM21]. **one** [Del19]. **one-dimensional** [Del19]. **open** [CBS20]. **open-source** [CBS20]. **optics** [vLtI19]. **optimization** [ESJ22, GKHG23]. **Order** [FP20, AVPK19, CACM19, EDvW20b, TR19, VOdLL19]. **organized** [WA23]. **orthonormal** [Chu23].

Parallel [CDRT20, CACM19, HSvL20]. **Parallel-in-time** [CDRT20]. **Parallelization** [KMP+20]. **parameter** [BE22]. **Parcel** [FDB23, FDB22]. **Parcel-In-Cell** [FDB23, FDB22]. **Part** [LVB+19, RBMM23a, RBMM23b, VLB+19]. **partial** [BE22]. **Particle** [DKKEB20, CHWW20, EDvW20a, HSvL20, MTA23, MCF+21]. **particle-in-cell** [MCF+21]. **particle-laden** [EDvW20a]. **particle-size** [EDvW20a]. **particles** [TR19, WPIJ20]. **parts** [ZP23]. **peel** [PRB23]. **Phase** [JLZ19, AVPK19, BKTZ19, SPNSB19]. **phase-field** [AVPK19]. **Phaseless** [JLZ19]. **phenomena** [AVPK19]. **photonic** [VCSSNP19]. **physical** [UkM19]. **planetary** [PBSM23]. **point** [BSD+20]. **polishing** [CHMP23]. **polygonal** [HR20]. **polyhedrons** [Mar21]. **polynomials** [LVB+19, VLB+19]. **pore** [WJNH19]. **pore-network** [WJNH19]. **porous** [CCFH20, CBS20, LMN+20, WJNH19]. **positioning** [Mar21]. **Positivity** [CWWW19]. **Positivity-preserving** [CWWW19]. **potential** [CWWW19, FNSA19]. **potentials** [GORV21]. **preserving** [CWWW19]. **probabilistic** [RKvdM21]. **problem** [JLZ19, LAH22, RMPA20]. **problems** [DGJT19, ESJ22, HOL19, KG20]. **process** [Dub19]. **propagation** [Chu23, FP20]. **properties** [Del19, ZP23].

quadrature [PDF19]. **quadratures** [GORV21]. **quantification** [DGJT19].

quantum [LÖR23].

radiative [PRB23, SP19]. **Raman** [NGP+19]. **random** [LYH19]. **rank** [PBSM23]. **ratio** [EDvW20a]. **RBF** [HM21]. **RBF-ENO** [HM21]. **reactive** [SPNSB19]. **real** [BKTZ19]. **real-valued** [BKTZ19]. **recursive** [LLR21]. **reduction** [MCF+21]. **refinement** [PMWK20]. **regularization** [ESJ22]. **Relative** [Chu23]. **Relativistic** [Del19, WPIJ20]. **remark** [Dub19]. **reordering** [LMN+20]. **represented** [AHS+19]. **reservoirs** [HVH20]. **resolution** [HM21]. **retrieval** [BKTZ19, JLZ19]. **Richardson** [Dub19]. **Riemann** [FAA20]. **rigid** [DKKEB20]. **robust** [VCSSNP19].

sampling [JLZ19]. **scale** [KMP+20, LCK19]. **scattering** [JLZ19]. **scheme** [CCFH20, Del19, DKKEB20, KHAA19, WWGS21, WPIJ20]. **schemes** [CWWW19, MCF+21, Tso19, vLtI19]. **Schrödinger** [Del19]. **second** [AVPK19]. **second-order** [AVPK19]. **selection** [Tso19]. **self** [WA23]. **self-organized** [WA23]. **September** [Ano19h, Ano20h, Ano21h, Ano22h]. **set** [BSD+20]. **shape** [GKHG23, WA23]. **shaped** [DKKEB20]. **sheet** [LAH22]. **shifting** [MTA23]. **shock** [BHL22, ZP23]. **shock-dynamics** [BHL22]. **signal** [Chu23, FAA20]. **simulating** [UkM19, WWGS21]. **simulation** [CHMP23, GKL+19, HVH20, SP19, VCSSNP19]. **simulations** [KHAA19, LCK19, LÖR23, LAH22]. **single** [LLR21]. **single-step** [LLR21]. **size** [EDvW20a]. **sizes** [LAH22]. **smooth** [AHS+19]. **Smoothed** [DKKEB20]. **smoothing** [RBMM23a, RBMM23b]. **solid** [HGL+19, SPNSB19]. **solid/aqueous** [SPNSB19]. **solidification** [PMWK20]. **solids** [LYH19]. **solution** [ESJ22]. **solver** [BHL22, KG20]. **solvers** [FAA20]. **source** [CBS20, JLZ19]. **space** [CCFH20]. **space-time-stepping** [CCFH20]. **spacing** [EDvW20a]. **Sparse** [MCF+21, TGC19, BE22]. **spatially** [PRB23]. **Spectral** [FP20, GKL+19, XP21, ZP23]. **spectral-element** [XP21]. **speed** [FAA20]. **SPH** [HOL19]. **sphere** [KG20]. **spherical** [LVB+19, VLB+19]. **Spline** [Mar21]. **stable** [AVPK19, CWWW19, LAH22]. **static** [WPIJ20]. **Stencil** [Tso19]. **step** [LLR21, LAH22]. **stepping** [CCFH20, KHAA19, LMN+20, TR19]. **stochastic** [DGJT19, KMP+20, VCSSNP19]. **Stokes** [CACM19]. **strategy** [MCF+21]. **stratified** [DDC23]. **stretching** [CP23]. **structure** [XP21]. **study** [ABS19, XP21]. **summation** [ZP23]. **surface** [AE21, CHMP23, FP20, LAH22]. **surfaces** [BSD+20, Chu23, PBSM23, WA23]. **surrogate** [RKvdM21]. **system** [LLR21, TGC19]. **system-free** [LLR21]. **systems** [LYH19, WL19].

technique [MTA23]. **temperature** [CHMP23]. **temperature-driven** [CHMP23]. **temporal** [LLR21]. **Tensor** [LVB+19, VLB+19]. **theory** [SPH+20]. **thermal** [PBSM23]. **thin** [LCK19]. **Three** [PDF19]. **Three-dimensional** [PDF19]. **time** [CCFH20, CDRT20, KHAA19, LMN+20, LAH22, TR19]. **time-step** [LAH22].

time-stepping [KHAA19, LMN+20, TR19]. **Total** [HGL+19]. **tracking** [TR19, UkM19]. **trajectories** [WPIJ20]. **trajectory** [HSvL20]. **transfer** [LYH19, PRB23, SP19]. **transport** [CCFH20, RBMM23a, RBMM23b, SPNSB19]. **truly** [HGL+19, VOdLL19]. **Two** [WPIJ20, DDC23]. **Two-dimensional** [WPIJ20, DDC23]. **type** [FAA20].

uncertainty [DGJT19]. **underdetermined** [ESJ22]. **Unified** [RBMM23a, WWGS21]. **uniform** [EDvW20b]. **uniqueness** [JLZ19]. **unstructured** [Tso19]. **Updated** [HGL+19]. **updates** [RBMM23b]. **upwind** [HGL+19]. **using** [FNSA19, LVB+19, VLB+19, WJNH19].

vacuum [LÖR23]. **valued** [BKTZ19]. **variable** [GKHG23]. **vector** [FNSA19]. **vectors** [Chu23]. **Verification** [XP21]. **vertex** [HGL+19]. **via** [LCK19, RMPA20]. **view** [PBSM23]. **viscosity** [BHL22]. **viscous** [DKKEB20, VOdLL19]. **Vlasov** [TGC19]. **volume** [HGL+19, Mar21, VOdLL19]. **volume-of-fluid** [Mar21].

walk [LYH19]. **wall** [CP23]. **wall-bounded** [CP23]. **waves** [FP20]. **weak** [LÖR23]. **weak-field** [LÖR23]. **weakly** [VOdLL19]. **weakly-compressible** [VOdLL19]. **weights** [HSvL20]. **WENO** [Tso19]. **wetting** [AVPK19]. **wire** [RMPA20]. **within** [DKKEB20].

References

Abgrall:2019:E

[Abg19] Rémi Abgrall. Editorial. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300423`.

Abgrall:2021:E

[Abg21] Rémi Abgrall. Editorial. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000172`.

Amore:2019:IHD

[ABS19] Paolo Amore, John P. Boyd, and Natalia Tene Sandoval. Isospectral heterogeneous domains: a numerical study. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300344`.

Ahlkrona:2021:CFE

[AE21] Josefin Ahlkrona and Daniel Elfverson. A cut finite element method for non-Newtonian free surface flows in 2D — application to glacier modelling. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S259005522100007X`.

Anderson:2019:DSF

[AHS+19] Joel Anderson, Robert J. Harrison, Hideo Sekino, Bryan Sundahl, Gregory Beylkin, George I. Fann, Stig R. Jensen, and Irina Sagert. On derivatives of smooth functions represented in multiwavelet bases. *Journal of Computational Physics: X*, 4:??, September 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300496`.

Anonymous:2019:EBa

[Ano19a] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 1:i, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300435`.

Anonymous:2019:EBb

[Ano19b] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300502`.

Anonymous:2019:EBc

[Ano19c] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300563`.

Anonymous:2019:EBd

[Ano19d] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 4:??, September 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300605`.

Anonymous:2019:Ja

[Ano19e] Anonymous. January 2019. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2019:Jb

[Ano19f] Anonymous. June 2019. *Journal of Computational Physics: X*, 3: ??, June 2019. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2019:M

[Ano19g] Anonymous. March 2019. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2019:S

[Ano19h] Anonymous. September 2019. *Journal of Computational Physics: X*, 4:??, September 2019. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2020:EBa

[Ano20a] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 5:??, January 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300068`.

Anonymous:2020:EBb

[Ano20b] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 6:??, March 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300159`.

Anonymous:2020:EBc

[Ano20c] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 7:??, June 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300263`.

Anonymous:2020:EBd

[Ano20d] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300329`.

Anonymous:2020:Ja

[Ano20e] Anonymous. January 2020. *Journal of Computational Physics: X*, 5:??, January 2020. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2020:Jb

[Ano20f] Anonymous. June 2020. *Journal of Computational Physics: X*, 7: ??, June 2020. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2020:M

[Ano20g] Anonymous. March 2020. *Journal of Computational Physics: X*, 6:??, March 2020. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2020:S

[Ano20h] Anonymous. September 2020. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2021:EBa

[Ano21a] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 9:??, January 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000020`.

Anonymous:2021:EBb

[Ano21b] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 10:??, March 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000123`.

Anonymous:2021:EBc

[Ano21c] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000184`.

Anonymous:2021:EBd

[Ano21d] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 12:??, September 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000202`.

Anonymous:2021:Ja

[Ano21e] Anonymous. January 2021. *Journal of Computational Physics: X*, 9:??, January 2021. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2021:Jb

[Ano21f] Anonymous. June 2021. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2021:M

[Ano21g] Anonymous. March 2021. *Journal of Computational Physics: X*, 10:??, March 2021. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2021:S

[Ano21h] Anonymous. September 2021. *Journal of Computational Physics: X*, 12:??, September 2021. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2022:EBa

[Ano22a] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 13:??, January 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000026`.

Anonymous:2022:EBb

[Ano22b] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 14:??, March 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000075`.

Anonymous:2022:EBc

[Ano22c] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 15:??, June 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000129`.

Anonymous:2022:EBd

[Ano22d] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 16:??, September 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000178`.

Anonymous:2022:Ja

[Ano22e] Anonymous. January 2022. *Journal of Computational Physics: X*, 13:??, January 2022. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2022:Jb

[Ano22f] Anonymous. June 2022. *Journal of Computational Physics: X*, 15:??, June 2022. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2022:M

[Ano22g] Anonymous. March 2022. *Journal of Computational Physics: X*, 14:??, March 2022. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2022:S

[Ano22h] Anonymous. September 2022. *Journal of Computational Physics: X*, 16:??, September 2022. CODEN JCPXAL. ISSN 2590-0552.

Anonymous:2023:EB

[Ano23a] Anonymous. Editorial Board. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S259005522300015X`.

Anonymous:2023:N

[Ano23b] Anonymous. November 2023. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552.

Aymard:2019:LSO

[AVPK19] Benjamin Aymard, Urbain Vaes, Marc Pradas, and Serafim Kalliadasis. A linear, second-order, energy stable, fully adaptive finite element method for phase-field modelling of wetting phenomena. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300265`.

Bonneville:2022:BDL

[BE22] Christophe Bonneville and Christopher Earls. Bayesian deep learning for partial differential equation parameter discovery with sparse and noisy data. *Journal of Computational Physics: X*, 16:??, September 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000117`.

Bruno:2022:FBS

[BHL22] Oscar P. Bruno, Jan S. Hesthaven, and Daniel V. Leibovici. FC-based shock-dynamics solver with neural-network localized artificial-viscosity assignment. *Journal of Computational Physics: X*, 15:??, June 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000063`.

Blinne:2019:ERP

[BKTZ19] Alexander Blinne, Stephan Kuschel, Stefan Tietze, and Matt Zepf. Efficient retrieval of phase information from real-valued electromagnetic field data. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300356`.

Bouchiba:2020:CFD

[BSD+20] Hassan Bouchiba, Simon Santoso, Jean-Emmanuel Deschaud, Luisa Rocha-Da-Silva, François Goulette, and Thierry Coupez. Computational fluid dynamics on 3D point set surfaces. *Journal of Computational Physics: X*, 7:??, June 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300214`.

Chalmers:2019:PHA

[CACM19] N. Chalmers, G. Agbaglah, M. Chrust, and C. Mavriplis. A parallel *hp*-adaptive high order discontinuous Galerkin method for the incompressible Navier–Stokes equations. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300393`.

Carrillo:2020:MFM

[CBS20] Francisco J. Carrillo, Ian C. Bourg, and Cyprien Soulaine. Multiphase flow modeling in multiscale porous media: an open-source micro-continuum approach. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300251`.

Carciopolo:2020:AMS

[CCFH20] Ludovica Delpopolo Carciopolo, Matteo Cusini, Luca Formaggia, and Hadi Hajibeygi. Adaptive multilevel space-time-stepping scheme for transport in heterogeneous porous media (ADM-LTS). *Journal of Computational Physics: X*, 6:??, March 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300044`.

Clarke:2020:PTI

[CDRT20] Andrew T. Clarke, Christopher J. Davies, Daniel Ruprecht, and Steven M. Tobias. Parallel-in-time integration of kinematic dynamos. *Journal of Computational Physics: X*, 7:??, June 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300093`.

Ciuca:2020:IHD

[CFC+20] C. Ciucă, P. Fernandez, A. Christophe, N. C. Nguyen, and J. Peraire. Implicit hybridized discontinuous Galerkin methods

for compressible magnetohydrodynamics. *Journal of Computational Physics: X*, 5:??, January 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300587`.

Caboussat:2023:NST

[CHMP23] Alexandre Caboussat, Julien Hess, Alexandre Masserey, and Marco Picasso. Numerical simulation of temperature-driven free surface flows, with application to laser melting and polishing. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000057`.

Chun:2023:RAO

[Chu23] Sehun Chun. Relative acceleration of orthonormal basis vectors for the geometric conduction blocks of the cardiac electric signal propagation on anisotropic curved surfaces. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000136`.

Carrillo:2020:PMH

[CHWW20] Jose A. Carrillo, Jingwei Hu, Li Wang, and Jeremy Wu. A particle method for the homogeneous Landau equation. *Journal of Computational Physics: X*, 7:??, June 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300184`.

Ceci:2023:NGS

[CP23] Alessandro Ceci and Sergio Pirozzoli. Natural grid stretching for DNS of compressible wall-bounded flows. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000069`.

Chen:2019:PPE

[CWWW19] Wenbin Chen, Cheng Wang, Xiaoming Wang, and Steven M. Wise. Positivity-preserving, energy stable numerical schemes for the Cahn–Hilliard equation with logarithmic potential. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300472`.

Dritschel:2023:CMA

[DDC23] Heidi J. Dritschel, David G. Dritschel, and Magda Carr. A conformal mapping approach to modelling two-dimensional stratified flow. *Journal of Computational Physics: X*, 17: ??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000070`.

Dellar:2019:RPI

[Del19] Paul J. Dellar. Relativistic properties and invariants of the Du Fort–Frankel scheme for the one-dimensional Schrödinger equation. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300034`.

Delgoshaie:2019:SCC

[DGJT19] Amir H. Delgoshaie, Peter W. Glynn, Patrick Jenny, and Hamdi A. Tchelepi. The stochastic counterpart of conservation laws with heterogeneous conductivity fields: Application to deterministic problems and uncertainty quantification. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300046`.

Dietemann:2020:SPH

[DKKEB20] Bastien Dietemann, Torsten Kraft, Harald Kruggel-Emden, and Claas Bierwisch. A Smoothed Particle Hydrodynamics scheme for arbitrarily shaped rigid bodies within highly viscous fluids. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300202`.

Dubeau:2019:RRE

[Dub19] François Dubeau. A remark on Richardson's extrapolation process and numerical differentiation formulae. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300332`.

Evrard:2020:ELM

[EDvW20a] Fabien Evrard, Fabian Denner, and Berend van Wachem. Euler–Lagrange modelling of dilute particle-laden flows with arbitrary

particle-size to mesh-spacing ratio. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300305`.

Evrard:2020:HFC

[EDvW20b] Fabien Evrard, Fabian Denner, and Berend van Wachem. Height-function curvature estimation with arbitrary order on non-uniform Cartesian grids. *Journal of Computational Physics: X*, 7:??, June 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300123`.

Epp:2022:HRS

[ESJ22] Robert Epp, Franca Schmid, and Patrick Jenny. Hierarchical regularization of solution ambiguity in underdetermined inverse and optimization problems. *Journal of Computational Physics: X*, 13:??, January 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000014`.

Fleischmann:2020:IAA

[FAA20] Nico Fleischmann, Stefan Adami, and Nikolaus A. Adams. On an inconsistency of the arithmetic-average signal speed estimate for HLL-type Riemann solvers. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300299`.

Frey:2022:EEP

[FDB22] Matthias Frey, David Dritschel, and Steven Böing. EPIC: the Elliptical Parcel-In-Cell method. *Journal of Computational Physics: X*, 14:??, March 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000051`.

Frey:2023:EPC

[FDB23] Matthias Frey, David Dritschel, and Steven Böing. The 3D Elliptical Parcel-In-Cell (EPIC) method. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000148`.

Fragile:2019:DFM

[FNSA19] P. Chris Fragile, Daniel Nemergut, Payden L. Shaw, and Peter Anninos. Divergence-free magnetohydrodynamics on conformally moving, adaptive meshes using a vector potential method. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300368`.

Fouques:2020:MEL

[FP20] Sébastien Fouques and Csaba Pákozdi. A mixed Eulerian–Lagrangian high-order spectral method for the propagation of ocean surface waves over a flat bottom. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300238`.

Gubler:2023:EVC

[GKHG23] Moritz Gubler, Marco Krummenacher, Hannes Huber, and Stefan Goedecker. Efficient variable cell shape geometry optimization. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000094`.

Ghiasi:2019:MEF

[GKL+19] Zia Ghiasi, Jonathan Komperda, Dongru Li, Ahmad Peyvan, David Nicholls, and Farzad Mashayek. Modal explicit filtering for large eddy simulation in discontinuous spectral element method. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S259005521930040X`.

Greengard:2021:FMM

[GORV21] Leslie Greengard, Michael O'Neil, Manas Rachh, and Felipe Vico. Fast multipole methods for the evaluation of layer potentials with locally-corrected quadratures. *Journal of Computational Physics: X*, 10:??, March 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000093`.

Hassan:2019:UVC

[HGL+19] Osama I. Hassan, Ataollah Ghavamian, Chun Hean Lee, Antonio J. Gil, Javier Bonet, and Ferdinando Auricchio. An up-

wind vertex centred finite volume algorithm for nearly and truly incompressible explicit fast solid dynamic applications: Total and updated Lagrangian formulations. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300411`.

Hesthaven:2021:HHR

[HM21] Jan S. Hesthaven and Fabian Mönkeberg. Hybrid high-resolution RBF-ENO method. *Journal of Computational Physics: X*, 12:??, September 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000068`.

Hermange:2019:ECS

[HOL19] C. Hermange, G. Oger, and D. Le Touzé. Energy considerations in the SPH method with deformable boundaries and application to FSI problems. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300241`.

Hoskins:2020:DLE

[HR20] Jeremy Hoskins and Manas Rachh. On the discretization of Laplace's equation with Neumann boundary conditions on polygonal domains. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S259005522030024X`.

Holm:2020:MPI

[HSvL20] Håvard Heitlo Holm, Martin Lilleeng Sætra, and Peter Jan van Leeuwen. Massively parallel implicit equal-weights particle filter for ocean drift trajectory forecasting. *Journal of Computational Physics: X*, 6:??, March 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300056`.

HosseiniMehr:2020:ADM

[HVH20] Mousa HosseiniMehr, Cornelis Vuik, and Hadi Hajibeygi. Adaptive dynamic multilevel simulation of fractured geothermal reservoirs. *Journal of Computational Physics: X*, 7:??, June 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300135`.

Ji:2019:PIS

[JLZ19] Xia Ji, Xiaodong Liu, and Bo Zhang. Phaseless inverse source scattering problem: Phase retrieval, uniqueness and direct sampling methods. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300022`.

Kaye:2020:FSN

[KG20] Jason Kaye and Leslie Greengard. A fast solver for the narrow capture and narrow escape problems in the sphere. *Journal of Computational Physics: X*, 5:??, January 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300630`.

Kaiser:2019:ALT

[KHAA19] Jakob W. J. Kaiser, Nils Hoppe, Stefan Adami, and Nikolaus A. Adams. An adaptive local time-stepping scheme for multiresolution simulations of hyperbolic conservation laws. *Journal of Computational Physics: X*, 4:??, September 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S259005521930054X`.

Kamath:2020:PSE

[KMP+20] S. Kamath, M. V. Masterov, J. T. Padding, K. A. Buist, M. W. Baltussen, and J. A. M. Kuipers. Parallelization of a stochastic Euler–Lagrange model applied to large scale dense bubbly flows. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S259005522030010X`.

Lofgren:2022:IST

[LAH22] André Löfgren, Josefin Ahlkrona, and Christian Helanow. Increasing stable time-step sizes of the free-surface problem arising in ice-sheet simulations. *Journal of Computational Physics: X*, 16:??, September 2022. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055222000105`.

Lam:2019:CDT

[LCK19] Michael-Angelo Y.-H. Lam, Linda J. Cummings, and Lou Kondic. Computing dynamics of thin films via large scale

GPU-based simulations. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055218300015`.

Lee:2021:RSF

[LLR21] Youngjun Lee, Dongwook Lee, and Adam Reyes. A recursive system-free single-step temporal discretization method for finite difference methods. *Journal of Computational Physics: X*, 12:??, September 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055221000159`.

Linga:2020:ILT

[LMN+20] Gaute Linga, Olav Møyner, Halvor Møll Nilsen, Arthur Moncorgé, and Knut-Andreas Lie. An implicit local time-stepping method based on cell reordering for multiphase flow in porous media. *Journal of Computational Physics: X*, 6:??, March 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300032`.

Lindner:2023:NSN

[LÖR23] Andreas Lindner, Baris Ölmez, and Hartmut Ruhl. Numerical simulations of the nonlinear quantum vacuum in the Heisenberg–Euler weak-field expansion. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000021`.

Lecoanet:2019:TCS

[LVB+19] Daniel Lecoanet, Geoffrey M. Vasil, Keaton J. Burns, Benjamin P. Brown, and Jeffrey S. Oishi. Tensor calculus in spherical coordinates using Jacobi polynomials. Part II: Implementation and examples. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300289`.

Lattanzi:2019:HLB

[LYH19] Aaron M. Lattanzi, Xiaolong Yin, and Christine M. Hrenya. A hybrid lattice boltzmann–random walk method for heat transfer in gas–solids systems. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552.

URL http://www.sciencedirect.com/science/article/pii/S259005521930023X.

Maric:2021:IVF

[Mar21] Tomislav Marić. Iterative volume-of-fluid interface positioning in general polyhedrons with Consecutive Cubic Spline interpolation. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S259005522100010X.

Muralikrishnan:2021:SGB

[MCF+21] Sriramkrishnan Muralikrishnan, Antoine J. Cerfon, Matthias Frey, Lee F. Ricketson, and Andreas Adelmann. Sparse grid-based adaptive noise reduction strategy for particle-in-cell schemes. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055221000111.

MacDonald:2020:MMM

[MMR20] Craig S. MacDonald, John A. Mackenzie, and Alison Ramage. A moving mesh method for modelling defects in nematic liquid crystals. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055220300172.

Morikawa:2023:CAI

[MTA23] Daniel Shigueo Morikawa, Kumpei Tsuji, and Mitsuteru Asai. Corrected ALE-ISPH with novel Neumann boundary condition and density-based particle shifting technique. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055223000033.

Nagaraj:2019:DMA

[NGP+19] Sriram Nagaraj, Jacob Grosek, Socratis Petrides, Leszek F. Demkowicz, and Jaime Mora. A 3D DPG Maxwell approach to nonlinear Raman gain in fiber laser amplifiers. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055219300010.

Potter:2023:FHL

[PBSM23] Samuel F. Potter, Stefano Bertone, Norbert Schörghofer, and Erwan Mazarico. Fast hierarchical low-rank view factor matrices for thermal irradiance on planetary surfaces. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000082`.

Patel:2019:TDC

[PDF19] Ravi G. Patel, Olivier Desjardins, and Rodney O. Fox. Three-dimensional conditional hyperbolic quadrature method of moments. *Journal of Computational Physics: X*, 1: ??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300058`.

Parkinson:2020:MBA

[PMWK20] James R. G. Parkinson, Daniel F. Martin, Andrew J. Wells, and Richard F. Katz. Modelling binary alloy solidification with adaptive mesh refinement. *Journal of Computational Physics: X*, 5:??, January 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300599`.

Peest:2023:MCR

[PRB23] Christian Peest, Oliver Reich, and Lena Bressel. Monte Carlo radiative transfer peel off mechanism for spatially extended detectors. *Journal of Computational Physics: X*, 17: ??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000100`.

Ramgraber:2023:ETSa

[RBMM23a] Maximilian Ramgraber, Ricardo Baptista, Dennis McLaughlin, and Youssef Marzouk. Ensemble transport smoothing. Part I: Unified framework. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000124`.

Ramgraber:2023:ETSb

[RBMM23b] Maximilian Ramgraber, Ricardo Baptista, Dennis McLaughlin, and Youssef Marzouk. Ensemble transport smoothing. Part

II: Nonlinear updates. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000112`.

Rocha:2021:FCS

[RKvdM21] I. B. C. M. Rocha, P. Kerfriden, and F. P. van der Meer. On-the-fly construction of surrogate constitutive models for concurrent multiscale mechanical analysis through probabilistic machine learning. *Journal of Computational Physics: X*, 9:??, January 2021. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300354`.

Rahmouni:2020:MBF

[RMPA20] Lyes Rahmouni, Adrien Merlini, Axelle Pillain, and Francesco P. Andriulli. On the modeling of brain fibers in the EEG forward problem via a new family of wire integral equations. *Journal of Computational Physics: X*, 5:??, January 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300642`.

Silvestri:2019:FGM

[SP19] S. Silvestri and R. Pecnik. A fast GPU Monte Carlo radiative heat transfer implementation for coupling with direct numerical simulation. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300484`.

Shohet:2020:HMM

[SPH+20] Gil Shohet, Jacob Price, Jeffrey Haack, Mathieu Marciante, and Michael S. Murillo. Heterogeneous multiscale method for high energy-density matter: Connecting kinetic theory and molecular dynamics. *Journal of Computational Physics: X*, 8:??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055220300226`.

Schmidt:2019:LMR

[SPNSB19] Michael J. Schmidt, Stephen D. Pankavich, Alexis Navarre-Sitchler, and David A. Benson. A Lagrangian method for reactive transport with solid/aqueous chemical phase interaction. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN

JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S259005521930037X.

Tao:2019:SGD

[TGC19] Zhanjing Tao, Wei Guo, and Yingda Cheng. Sparse grid discontinuous Galerkin methods for the Vlasov–Maxwell system. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055219300381.

Tretiak:2019:AOT

[TR19] Krasymyr Tretiak and Daniel Ruprecht. An arbitrary order time-stepping algorithm for tracking particles in inhomogeneous magnetic fields. *Journal of Computational Physics: X*, 4:??, September 2019. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055219300526.

Tsoutsanis:2019:SSA

[Tso19] Panagiotis Tsoutsanis. Stencil selection algorithms for WENO schemes on unstructured meshes. *Journal of Computational Physics: X*, 4:??, September 2019. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055219300538.

Ullah:2019:NSM

[UkM19] Mohammed Aman Ullah and De kang Mao. Numerically simulating the missing physical dissipations in a conservative front-tracking method. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055219300253.

Vidal-Codina:2019:MCG

[VCSSNP19] F. Vidal-Codina, J. Saà-Seoane, N.-C. Nguyen, and J. Peraire. A multiscale continuous Galerkin method for stochastic simulation and robust design of photonic crystals. *Journal of Computational Physics: X*, 2:??, March 2019. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055219300320.

Vasil:2019:TCS

[VLB+19] Geoffrey M. Vasil, Daniel Lecoanet, Keaton J. Burns, Jeffrey S. Oishi, and Benjamin P. Brown. Tensor calculus in spheri-

cal coordinates using Jacobi polynomials. Part I: Mathematical analysis and derivations. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300290`.

vanLith:2019:AFS

[vLtI19] Bart S. van Lith, Jan H. M. ten Thije Boonkkamp, and Wilbert L. IJzerman. Active flux schemes on moving meshes with applications to geometric optics. *Journal of Computational Physics: X*, 3:??, June 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300460`.

Vittoz:2019:CWC

[VOdLL19] L. Vittoz, G. Oger, M. de Leffe, and D. Le Touzé. Comparisons of weakly-compressible and truly incompressible approaches for viscous flow into a high-order Cartesian-grid finite volume framework. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300319`.

Wittwer:2023:CMS

[WA23] Lucas D. Wittwer and Sebastian Aland. A computational model of self-organized shape dynamics of active surfaces in fluids. *Journal of Computational Physics: X*, 17:??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055223000045`.

Weishaupt:2019:ECF

[WJNH19] Kilian Weishaupt, Vahid Joekar-Niasar, and Rainer Helmig. An efficient coupling of free flow and porous media flow using the pore-network modeling approach. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552. URL `http://www.sciencedirect.com/science/article/pii/S2590055219300277`.

Wang:2019:BFE

[WL19] Xin Wang and Yingjie Liu. Back and forth error compensation and correction method for linear hyperbolic systems with application to the Maxwell's equations. *Journal of Computational Physics: X*, 1:??, January 2019. CODEN JCPXAL. ISSN 2590-0552.

URL http://www.sciencedirect.com/science/article/pii/S2590055219300307.

Wu:2020:TDL

[WPIJ20] Chuanren Wu, Ioannis Gr. Pagonakis, Stefan Illy, and John Jelonnek. Two-dimensional leapfrog scheme for trajectories of relativistic charged particles in static axisymmetric electric and magnetic field. *Journal of Computational Physics: X*, 8: ??, September 2020. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055220300317.

Wen:2021:IDU

[WWGS21] Xin Wen, Lian-Ping Wang, Zhaoli Guo, and Jie Shen. An improved discrete unified gas kinetic scheme for simulating compressible natural convection flows. *Journal of Computational Physics: X*, 11:??, June 2021. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055221000056.

Xu:2021:VCS

[XP21] YiQin Xu and Yulia T. Peet. Verification and convergence study of a spectral-element numerical methodology for fluid-structure interaction. *Journal of Computational Physics: X*, 10:??, March 2021. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S2590055221000019.

Zhang:2023:DGS

[ZP23] Fengrui Zhang and Yulia T. Peet. Discontinuous Galerkin spectral element method for shock capturing with summation by parts properties. *Journal of Computational Physics: X*, 17: ??, November 2023. CODEN JCPXAL. ISSN 2590-0552. URL http://www.sciencedirect.com/science/article/pii/S259005522300001X.