Bibliography of the Book *Matrix Computations*

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Abstract

This bibliography is from the book *Matrix Computations*, Second Edition, by Gene H. Golub and Charles F. Van Loan, The Johns Hopkins University Press, Baltimore, Maryland 21218, 1989.

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$(A - \lambda B)x = 0$ [Sch74]. $^{-1}$ [KW87]. A [PW69, You72]. $A - \lambda B$ [Kåg85, Kåg86, TW70]. $A = 1 + H$ [Buc74]. $\{a_{ij}\}$ [Asp59]. $a_{ij} = 0$ [Asp59]. $AX + XB = C$ [BS72, GNL79]. $AX - XB^T = C$ [Bye84]. $Ax = \lambda Bx$ [Erd67, GUW72, MW68c, PW69, PW70a, Rod73, Ste72, Ste75b]. $Ay = \lambda By$ [TW72]. B [PW69]. ℓ [Hoc83]. H [Buc74]. ijk [OR88]. $j > i + p$ [Asp59]. k [NV83]. L_1 [BCS78, BR73, CP76]. L_2 [GV74]. L_∞ [BCC78]. M [Bar87, MdV77]. N [JH88]. $O(n^2)$ [Dor73]. R^N [Bjö88]. $\sum f_p(A)Xg_p(A)$ [WZ72]. $\|A^{-1}\|$ [Var76].

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[AM65]. **Extreme** [Ste75a].

F.L [Rut69]. **FACR** [Hoc83]. **Factor** [Gre52, Hot57]. **Factoring** [Ris73, Ser80]. **Factorization** [AP86, Bis88b, BBDdH87, BBdH86, DGKS76, DD88, DSS86, Elm86, ER74, GH85, GH86, GHL86, GM76, GM86, HS86, Kie87, Luk86a, Man79, Mei83, Mer85, OS86, OR88, PJV87, SS79, ST86, Ste77b, Ste79a]. **Factorizations** [Cha85, Cha87, CJZ83, GGMS74]. **Factorized** [Gol76]. **Factorizing** [Fle76]. **Factors** [GMS75, HH89]. **Far** [KP76]. **Fast** [CG73, Hig88c, HS88, Hoc65, MP74, Pai79b, Rat82]. **Few** [Cul78, Sco84]. **Fields** [Hen62]. **Filter** [Lev47]. **Find** [Blu78, Cra86]. **Finding** [Bud64, CM83, GWDF88, Van71]. **Finite** [Geo73, Gre81, Hal58, Tre64, Var72]. **Finite-Difference** [Var72]. **First** [Hea86]. **Fit** [Pea01]. **Fitting** [Dur60, Mad59]. **Floating** [Mol67, Ste81a]. **Flow** [FG86, OS85]. **Form** [Aas71, Bus69, Cup83, Dem83b, Doo79, Giv58, GW76, KR80a, KR80b, MW68c, MW68d, MW31, Uhl76, Wat73, Wil78, Wil79, DHS87]. **Forms** [DR75, GU70, OR88]. **Formulation** [FNO87]. **Fortran** [Blu78, DCHH88a, DCHH88b, DE84, DH79, Hig88d, KW87, LHKK79a, LHKK79b, Ste76a]. **Found** [Ruh87]. **Fourier** [Hoc65]. **Frequency** [Lau81]. **Fully** [DS87a]. **Function** [Eld85, Rin55]. **Functional** [Dav73]. **Functions** [BCS78, Des63, Fra64a, Fra64b, Kåg77b, Mir60, Par74a, Par76, PT57]. **Funzioni** [Bel73].

Game [TW72]. **Gauge** [Mir60]. **Gauss** [BR70, GW69, KP81]. **Gauss-Jordan** [BR70]. **Gauss-Markov** [KP81]. **Gaussian** [Boh75, Bro73, Bus71a, Coh74, CMR88, Cry68, DK77, DP88, HH89, Rei71a, Ske79, Ske80, Sor85, Str69, TS87]. **General** [Bjö84, FJL+88, Giv58, Kåg85, KP81, Loa75a, MW68d, McC72, Pai85, Ruh69a, Swa79, Var68a, Var68b, Var70a]. **Generalization** [GHS88, Gou70, Ruh68, You72]. **Generalizations** [BV68, FV62, Par74b]. **Generalized** [AL84, BG84b, CGO76, Cra73, Cra76, DT87, Doo81a, Doo81b, Eld83, Eld85, ES82, ER80, FH72, FNP82, GHW79, JY83, JO77, Kåg85, KW87, KdV77, Kau74, Kau77, Kau87, KF64, Loa73, Loa83, Loa85a, MS73b, Nas76, Pai79a, Pai79b, Pai85, Pai86, PS81, PW70a, SS86, Sch66, Ste75b, Ste76b, Ste78, Ste79c, Ste83, Sun83, Swe74, Van71, War81, YJ80, dV77, dV82a]. **Generalizing** [CCL82, Loa76]. **Generate** [Uhl76]. **Generation** [AOU87, Ste80]. **Geometric** [PP73]. **Geometrical** [Nic74]. **Geometry** [AM65]. **Gershgorin** [FV62, Joh71, Sco85, Ste75b, Var70b]. **Gigaflop** [DH86]. **Given** [OP64]. **Givens** [Duf74, Gen73a, Gen73b, GH80, Ham74, MC86, Rat82]. **Gleichungen** [Jac46]. **Global** [Har82, HP78, Par68, Wil68b]. **GMRES** [SS86, Wal88]. **Go** [KP76]. **Good** [GHW79]. **Gradient** [Ada85, Ash87, AMS88, Axe80, Cli76b, CGM85, CGO76, CW77, CW80, Eis84, FM84, Gin71, Gre81, JY83, Jen77a, JMP83, Jor84, Mel87, Meu84, O'L76, O'L80a, Rod73, Sea86, Woz80, YJ80]. **Gradients** [HS52, Rei71b, Rei72, RW72b, Ste75a, vdSdV86]. **Grain** [Bis88b]. **Gram** [Abd71, Bjö67b, DGKS76, Ric66a, Ruh83, Saa86]. **Gram-Schmidt** [Abd71, Bjö67b, DGKS76, Ric66a, Ruh83]. **Grands** [GM83]. **Granularity** [CDH84]. **Group** [GM86]. **Growth** [DP88, HH89]. **GSV** [Pai84]. **GSYLV** [KW87]. **GSYLV-** [KW87]. **Guang** [Pai84]. **Guide** [DBMS78, GBDM72, Mol80, MLB87, SBI+70].

Hamiltonian [Bye83, Bye86, Loa84, PL81]. **Hand** [OP64, Saa87]. **Handbook** [BE68, CL88, AL76]. **Hankel** [Phi71, Ris73]. **having** [Cox81]. **Havsbad** [KR83]. **HEP**

[DH84, LO83]. **Hermite** [GP71]. **Hermitian** [AG87, AG88, BBI71, CM83, DT71, EY39, Gou70, Hen58, Kah67, Kah75, Mah79, Mue66, Pai74b, Sch79, Ste69, Ste76d]. **Hessenberg** [Bus69, Bus71b, GNL79, Gra86, Ike79, Loa82, MPW70, MW68b, MW68d, Par67, Par68, Ste76a]. **Hessenberg-Schur** [GNL79]. **Hestenes** [Han88]. **Hierarchical** [GJM87, GJMS88]. **High** [Bai88b, DKH86, DS86]. **Higher** [Var61]. **Higher-Order** [Var61]. **Householder** [BL87, BG67, BG65, CM88, Cup84, HL69, Kau79, Kau87, LH69, MW68a, Mue66, PR68, Rei67, SL89, Tsa75, Wal88]. **HQR3** [Ste76a]. **Hybrid** [O'L76]. **Hyperbolic** [APP88, DI86]. **Hypercube** [Bis87, Dav86, Ebe87, FOH87, GH85, GH86, GWDF88, Hea86, Hea87, HHP88, Joh87a, KNP87, MvdV87]. **Hypercubes** [SS85a, SS85b, WAC+88]. **Hypermatrix** [NV75].

IBM [DD88, KL88]. **ICCG** [Ker82, PO87, dV82b]. **Identity** [Bre70]. **II** [Bjö68, BPS86b, Fra61, Fra64a, GV61, Hou68, MS78, OR88, Wra75]. **III** [DK70]. **Ill** [Dem87b, DK88, Eld77a, Eld84, Eld85, ES86, FH72, GW76, OS81, PW79, Ruh70b, Var73, Wil72]. **Ill-Conditioned** [Eld77a, Eld84, Eld85, FH72, GW76, PW79, Ruh70b, Var73, Wil72]. **Ill-Posed** [Dem87b, DK88, ES86, OS81, Var73]. **ILLIAC** [Luk80]. **Impact** [GJMS88, GR84]. **Implementation** [CVD88, DCHH88a, DSS86, Eis84, KL88, LO83, Mel87, MP85, Ruh79, Wal88]. **Implementations** [MvdV87]. **Implementing** [DGK84, DH86, Tsa75]. **Implicit** [Dub70, DMW68, Ste81b, Var61]. **Implies** [JW77, Ske80]. **Improved** [BR73, Cha82a, Cha82b]. **Improving** [Don83, DMW83]. **Inaccurate** [CR79]. **Inclusion** [Kah67]. **Incomplete** [CJZ83, Elm86, Man79, RW84a, RW84b]. **Inconsistent** [Axe80]. **Incorporating** [Ste70]. **Indefinite** [AG87, AG88, BG76, BP71, Fle76, PS75, Saa84]. **Independent** [Ste77c]. **Inequalities** [MM64]. **Inertia** [BK77]. **Inexact** [GO88]. **Influence** [Jen77a]. **Inner** [Win68]. **Integral** [JP71, Lan50, Sch09, Smi70]. **Integrals** [Loa78a]. **Interchanges** [Fos86]. **Intermediate** [SLN75]. **Interpretation** [CW80]. **Interpreting** [Jor87]. **Interval** [Yoh79]. **Intervals** [CW79]. **Introduction** [Bel70, Fox64, GK69, Lue73, Mir55, Ste73c, TA61]. **Invariance** [Ste84b]. **Invariant** [Dem87d, GLR86, MP82, Mir60, Par66, Ruh70a, Ste71, Ste76d, Var70a]. **Inverse** [Asp59, BG78, DGR79, Fri75, Fri77, FNO87, GK65, PW71, PW79, RW72b, Var68a]. **Inverses** [All73, Gau75a, GP73, GP76, Hen62, Ike79, Nas76, PW70b, Ste77a, Wed73b]. **Inversion** [BR70, GM86, Tre64, Tre74, Wat73, Wil61, Zoh69]. **Involving** [Hig88c, Loa78a]. **Irregular** [BD74, BDGG71]. **Isolated** [Ste75a]. **Iterates** [Hen62]. **Iteration** [CJ70, CJ71, JO71, JS75, Lan50, Man77, McK62, Par74b, PW71, PW79, RW72b, Rut69, Rut70, Ste69, Ste75c, Ste76d, Var68a]. **Iterations** [Arn51, PP73]. **Iterative** [Axe77, Axe85, BI75, BNP88, BS70, Bjö67a, Bjö68, BB71, BG67, Bun69, DGR79, Eva84, GO88, GV61, GW66, HY81, JW77, MPW66, McC72, MdV77, Mol67, NV83, Ple86, Ske80, Und75, Var62, Wac66, You71, YJ80, EN83]. **IV** [Fra64b, Luk80].

J [Pai84]. **J.-Guang** [Pai84]. **Jacobi** [AL76, AR85, BS86, Bis87, BG78, BG84a, BE68, BP75b, Ebe70, Ebe87, FH60, GH84, Han62, Han63, Hen58, HZ68, Hua75, KG83, Loi72, MP85, PT57, Ruh67, Ruh68, Rut66, Sam71, Sch64, SHW86, Sea69, SS87, Ste85, vK66]. **Jacobi-Like** [Sam71, Ste85]. **Jacobi-Type** [AL76, BE68, Ebe70, Hua75]. **JNF** [KR80a].

Jordan [BR70, Dem83b, GW76, KR80a, KR80b, Loi69].

Kogbetliantz [Bai88a, CD87, CVD88, PD86]. **Kronecker** [Doo79, Kåg86, Wil78, Wil79]. **Krylov** [Saa81, Saa84].

Lanczos [CGP76, CD74, CW77, CW79, CW80, CW85b, CW85a, CWL83, ER80, Gol74, GLO81, GU77, GUW72, KP74, KP76, KdV77, Pai70, Pai76, Pai80, Par80a, PR81, PS79, PSS82, Ruh79, Saa80, Saa82, Saa87, Sco78, Sco79a, Sco79b, Sim84, Und75, Wid78, dV82a]. **Large** [BPS81, Cul78, CD74, CW79, CW85b, CW85a, CW86, CWL83, Enr79, ER80, GL81a, GM76, HH89, Jen72, OS81, Pai71, PR81, Rei71b, Ruh74, Ruh79, Saa81, Saa82, Ste74, Ste76b, Und75, Van71, You71]. **Large-Scale** [BPS81]. **Largest** [Cul78, CD74, PSS82]. **Latent** [GWM76]. **Lattice** [Cyb84]. **LDV** [GMS75]. **Least** [Abd71, APP88, AK75, BNP88, Bau65, Bjö67a, Bjö67b, Bjö68, Bjö84, BG67, BG65, Cli73, Cox81, Cyb84, Eld77a, Eld77b, Eld80, Eld83, Eld84, Eld85, Gan81, Gen73b, GH80, Gol65, GKS76, GL80, GP73, GP76, GR70, GW66, GWM76, HL69, Huf87, Huf88, HV87, HV88a, HV88b, JO74, Kar74, KP81, LH69, LH74, Lin61, Loa83, Loa85c, Pai79a, Pai79b, PS78, PS82a, PS82b, PW70b, Ple74, PR68, Rei67, Saa86, SS79, Ste77a, Ste87, Wed73a, vdS75b, Dem87c]. **leichtes** [Jac46]. **Level** [DD88, DCDH88, KL88]. **Level-3** [DD88]. **Levinson** [Cyb80]. **Levinson-Durbin** [Cyb80]. **Like** [Sam71, Ste85, Hig88c]. **Limitation** [Loa77a]. **Linéaires** [GM83]. **Linear** [Abd71, AM65, ADD88, AC76, Axe77, Axe80, Axe85, BCC78, BCS78, BG76, BP75a, BR73, Bau65, Bjö67a, Bjö67b, Bjö68, Bjö84, BG67, BG73, BMPW66, Buc77, Bun76, Bun87, BK77, BP71, BG65, Cal86, CDH84, Cli73, CP76, Cox81, Cra86, CM83, Cyb84, DJK+88, DCHH88a, DGK84, DH84, DH86, DS86, Doo81a, DR76, DS58, Eld80, ES86, Enr79, FF63, FF77, FM67, Fox64, GJM87, GJMS88, Geo74, GH80, GK69, Gol65, Gol74, GL79, GO88, GU70, Hag88, HL69, Hel76, Hel78, HS52, Hig85, ISS86, JY83, Joh87a, Kah66, Kan66, Kar74, Kat66, Ker82, Kog55, KP81, LV75, Lan50, Lan70, Lau85, LH69, LHKK79a, LHKK79b, Leo80, Lue73, Mah79, Mak75, MP74, Man77, MG76, MdV77, MP82, Mir55, NV83, ND77, OP64, Pai74a, Pai79b, Pai85, PS75, PS78, PS82a, PS82b, Par80a, PR70, Ple74, PR68, Rei67, Rei71b, Rei72, Rob77, Ros69, Saa81, Saa84, SS86, SK78, Sch09, SS79, Ste71, Ste73a, Ste77a, Ste77c, Ste81b, Sto73, Str88, Var73, Vet75, WAC+88, Wid78, Wil77, Wil78, WR71, You71, dBP77, vdS70, vdS75b, DCDH88, DCHH88b]. **Lines** [Mad59, Pea01]. **LINPACK** [CCL82, DBMS78, Bye84]. **Linpack-Style** [Bye84]. **Local** [Cal86]. **Local-Memory-Based** [Cal86]. **Logarithms** [Hel68]. **Look** [Par80a]. **Loops** [DH79]. **Low** [AG87, AG88]. **Lower** [Var75]. **Lowers** [Wat88, Dem87c]. **Lowest** [BS70]. **LR** [Fra61, MW68b, Wil65b]. **LSQR** [PS82a, PS82b]. **LU** [Cha85, Dav86, DD88, Elm86, PP73, WAC+88]. **Lyapunov** [BS68, BN87]. **LZ** [Kau74].

m [Ada85]. **m-step** [Ada85]. **Machine** [DGK84, Var68b]. **Macros** [LO83]. **Make** [Sco79b]. **Manifestations** [Cot74]. **Markov** [Bar87, GM86, KP81, SS76]. **Mathematical** [FMM77, Hoa77, Ric81]. **MATLAB** [Mol80, MLB87]. **Matrices** [All73, AL76, AOU87, AG87, AG88, AR85, AC76, Asp59, AP86, Bau63, BR68, BR70, BBI71, BL87, BBdH86, BG78, BG84a, BMRW68, Buc74, Bud64, Bun71b, Bun74, Bun82, BGG88, Bus68, Bus71b, Cra86, CM83, CD74, CW79, CWL83, Cup84, Cut72, DT71, Des63, DGK84, DHS87, Dub70,

Duf74, DER86, DR75, Ebe65, Ebe71, EY39, FV62, FL74, FU69, Fle76, Fou84, Fri75, Fro65, FNP82, Gan59a, Gan59b, Gau75a, Gau75b, GWDF88, GLR86, GH59, Gou70, Gra86, GH84, GL81b, Har82, HLPW86, Hel68, Hen58, Hen62, Hig87c, Hou74, Hua81, Ike79, JO77, JS75, Joh71, JH87a, Kah67, Kah75, KP74, KPJ82, Kau87, KG83, LT85, Lem73, Loi69, Loi72, Lot56, Mah79, MPW70, MRW70, MW65, MW67, MW68b, MS73a, Mue66, MW31, Nic74, Osb60, Paa71, Pai71, Pai74a, Pai74b, PL81, Par66, Par67, Par68, Par74a, Par74b, Par76, Phi71, PT57, RB68, Ris73, RW72a, Ruh67, Ruh68, Ruh74, Ruh75, Ruh79, Rut66, Rut70, Saa86, SLN75, Sch79, Sea69, Ser80, Ste70, Ste75c, Ste76d, Ste80, Tre64, Tre74, TA61, Uhl73, Uhl76, Van71, Var70b, Var79, WAC+88, WG78, Wat73, Wil68a, Wil72, Wil84, vdS69, vdS75a].

Matrix [Aas71, AK75, AL73, Arn51, Bai88b, Bar87, BI75, BMW67, BS68, Bel70, BS70, BB71, BH83, BPS81, BG78, Bre70, BKP76, BR76, Bus69, BG69, CP77, CS87, CJ70, CMSW79, CL88, CMR86, Cul78, CL86, Dem83a, DK87, DSS86, DGR79, Duf77, DS78, ER88, Erd67, ER74, FH60, Fos86, FOH87, Fra64a, Fra64b, FG86, GBDM72, GH86, GK82, GPS76a, GGMS74, GM76, GMS75, Giv58, Gol69, Gol73, GK65, GL89, GLO81, GNL79, GT81, GV74, HS86, Hig86c, Hig87a, Hig88b, Hig88d, Hig88e, Hig89, HS88, Hou58, Hua75, HVH87, Jen77b, Joh86, JH88, JP71, Kåg77a, Kåg77b, KR80a, KR80b, KR83, Kau79, Kau83, Kog55, KM86a, Lan70, Lew77, Loa75a, Loa75b, Loa77a, Loa77b, Loa78a, Loa78b, Loa84, Loa85b, Luk78, MRK76, MM64, MPW65, MW68a, MW68d, MdV77, Mod88, Mol86, ML78, MS73b, O'L80b, OS85, OS86, Ort88, Pai73, Pai76, Pan84, PR69, PR70, Pry85, Ric81, Rin55, Ris73, Rod73, Ruh69a, Ruh69b, Ruh70b, Ruh78, Ruh87, Sch68, Sco84, Sco85, SB79, Smi67, SBI+70, Ste69, Ste73c, Ste76a, Ste77b, Ste85, Sun82, TG81, TW72, Var62, Var68a, Var68b, Var70a, Var75, Vet75, War77, Wat88, Wil61, WZ72, Wra73, Wra75, Zoh69, Hig86b]. **Max** [Bun71b]. **Max-Norm** [Bun71b]. **Maximizing** [PT57]. **Means** [Ruh70a]. **Measure** [Pry84]. **Measurement** [Coc68]. **Measurements** [HN81, Jor87]. **Measures** [Ebe65]. **Mechanics** [BW73]. **Memory** [Cal86, EHHR88, GJM87, GJMS88, GHL86, HR88, JH87a, KNP88, LC88, Mol86, PJV87]. **Mesh** [BLL85, Geo73]. **Method** [Abd71, AL76, AR85, Bar71, BCC78, BMW67, Bis87, Bjö87, BH83, BG84a, BE68, Bun71a, Cli73, Cli76a, CGP76, CJ71, CGM85, CGO76, Cup81, DF76, Ebe70, Ebe87, ER80, FM84, FH60, Gin71, GHW79, GLO81, GNL79, GU77, Gup72, Han87, Han88, Har82, HS86, Hig86c, Hua75, Jen77a, JO71, KW87, Lan50, Lin61, Loa84, Loa85c, Loi72, Luk86a, MP74, MdV77, Meu84, MP85, Mue66, Nas75, Pai73, PJ84, PW79, PT57, PR68, Rei71b, Rod73, Ruh67, Ruh68, RW72b, Rut66, Rut69, Rut70, Saa87, Sch74, SS79, Sea69, Ste75a, Ste83, Und75, Wal88, Wid78, vK66]. **Methods** [Ada85, Ash87, AMS88, Axe77, Axe80, Axe85, AP86, BNP88, BW73, BR70, BV68, BG73, BP75b, Bun76, Bun85, BK77, BP71, BGN70, Cli76b, CG73, Dem87d, DS83, DER86, DR76, EN83, Eis84, Eld77b, Eva84, FF63, FMM77, FNO87, GGMS74, GMS75, Gol65, Gol76, GO88, GV61, HY81, Han62, Han63, Hen58, Hes80, HS52, Hot57, JY83, JH87b, KMN88, Kau83, KF64, Loa83, McC72, Mel87, Meu89, NV83, O'L80a, OR88, PO87, Ruh74, Saa80, Saa81, Saa82, Saa84, SS87, Sim84, Ste73a, Ste75c, Van71, Var61, Wil61, You70, YJ80, dV82b]. **Metric** [Gol76]. **MGS** [Ple74]. **MIMD** [CMR88]. **Minimal** [SS86, Var70b]. **Minimization** [BCS78]. **Minimized** [Arn51]. **Minimum** [CL86]. **Mirsky** [GHS88]. **Missized** [FG86]. **Model** [DCHH88a, KP81, Pai85]. **Modelling** [AC84]. **Models** [Dur60, HS66, SS76]. **Modern** [Wil71].

Modes [CGP76]. **Modification** [AGG88, BNS78]. **Modifications** [Ham74]. **Modified** [BG84a, EHHR88, Gol73, MW68b, Sea69]. **Modifying** [GGMS74, GMS75]. **Moments** [Hou68]. **Monitoring** [Bus71a, ER74, KdV77]. **Monitors** [LO83]. **Most** [DE84, DKH86]. **MP** [CDH84, DH86, Sea86]. **Multicolor** [PO87]. **Multidimensional** [GP70]. **Multiple** [JH87b, Wil68a]. **Multiplication** [Bai88b, Bre70, CS87, FOH87, MRK76, Pan84]. **Multiplications** [PS73]. **Multiplicative** [Fri75, Pry85]. **Multiplying** [JH87a]. **Multiprocessing** [CDH84]. **Multiprocessor** [BS86, BL85, Dav86, GH85, GWDF88, GHL86, KNP87, LC88, LPS87, PJ84, PJV87]. **Multiprocessors** [EHHR88, Hea86, Hea87, HR88, Joh87a, JH87b, Mol86]. **Multitasking** [DH86]. **Multivariable** [Lau81]. **Multivariate** [Ham85, Hot57].

Narrow [Joh85]. **Near** [Loa85b]. **Nearest** [Dem87b, Hig88b]. **Nearly** [Cha84, Kah75, Ste81b]. **Nearness** [Hig85, Hig88e]. **Necessary** [FM84, PS73]. **Neighboring** [Wil84]. **Nested** [Geo73]. **Networks** [HI83]. **Newer** [Hot57]. **Newton** [BR68, Hig86c, PW79, RB68]. **Nineteen** [ML78]. **Non** [BS70, Bun69, Ebe65, EY39, GK69, Hen62, Ste76d]. **Non-Hermitian** [EY39, Ste76d]. **Non-Iterative** [Bun69]. **Non-Normal** [Hen62]. **Non-normality** [Ebe65]. **Non-Self-Adjoint** [GK69]. **Non-Symmetric** [BS70]. **Nongeneric** [Huf88]. **Nonhermitian** [Ste85]. **Nonlinear** [DS83, GP73, GP76, Lue73]. **Nonlinearly** [Hea78]. **Nonnormal** [KPJ82, Par74b, vdS75a]. **Nonnormality** [Loi69]. **Nonscalar** [PS73]. **Nonseparable** [CG73]. **Nonsingular** [Uhl76]. **Nonsymmetric** [Hou58, Man77, Saa84, SS86, Wid78]. **Nonsymmetrizable** [JY83, YJ80]. **Norm** [BP75a, Blu78, BE68, Bun71b, Des63, Ebe70, Gau75a, Hig88d, Ruh69b]. **Norm-Reducing** [BE68, Ebe70]. **Normal** [CGP76, GH59, Hen62, Hua81, KR80a, KR80b, Loi72, Ruh67, Ruh75, Ruh87]. **normality** [Ebe65]. **Norms** [BF60a, BF60b, HZ68, Mir60]. **Notations** [AS83]. **Note** [Bai88a, BBI71, BBDdH87, Buc74, Bun82, Coh74, Dub70, Eld85, GW66, Ham74, Kie87, Loa78b, Pai84, Rei67, Rei71a, Ruh78, Ste79b, Sun82, Tsa75, Wil72]. **Null** [Fos86, Ste84b]. **Number** [Bro73, CMSW79, CR83, Dem83a, GL81b, Han88, Hig87c, PS73, Saa86, Hig86b]. **Numbers** [AR85, CP77, FL74, Lem73, Loi69, O'L80b, Smi67, vdS69]. **Numerical** [BG73, Bun87, Bus71a, CdB80, CG73, CGO76, Cyb80, Cyb84, Dem83b, Dem84, Dem88, DS83, Eld77b, Enr79, ER80, Fox64, FNO87, GP70, GR84, Gol65, Gol74, Hag88, Hea78, Hel78, Hig85, Hou74, IP87, JW77, Kåg77b, KR80a, KR80b, Kah66, KMN88, Lau85, Mil75, Ort72, Pai81, Ruh69a, Ruh83, She55, Ske79, Ske80, Ste74, Var73, War77, Wil77, dV77]. **Numerically** [Bus71b, GH84, Pai79b]. **Numérique** [GM83]. **numerisch** [Jac46].

O. [Enr79]. **Oblique** [Gre52, Saa82]. **Observation** [Lin61]. **observations** [Cli76b]. **Oceans** [CGP76]. **Odd** [Joh84]. **Odd-Even** [Joh84]. **One** [BNS78, Hig88d, McC72, Nas75]. **One-Norm** [Hig88d]. **One-Sided** [Nas75]. **One-Step** [McC72]. **Operations** [Dor73, ER88]. **Operator** [BN87, FL70]. **Operators** [DS58, GK69, HZ68, Kat66, Lan50, Ste71]. **Optimal** [AC76, BI75, Cha88, MS73a, Str69]. **Optimale** [Leh63]. **Optimally** [Bau63, Bus68, FL74, Gau75b]. **Optimization**

[CW80, DS83, Gol76, Hea78, Hes80]. **Optimizing** [Hoc83]. **Order** [GV61, Ste84d, Var61]. **Ordering** [Duf74, MC86, Nic74, Ste76a, You72]. **Orderings** [BV68]. **Ordinary** [DNT83]. **Oriented** [Cal86]. **Origin** [Hua81, Ste70, Wil68b]. **Orthogonal** [AOU87, BB71, ER88, GM76, Gre52, HI83, Hig88c, MW31, PJV87, Rat82, Sch66, Ste69, Ste80, vdSV79]. **Orthogonalization** [BI75, Bjö67b, PS79, Ric66a, Ruh83]. **Other** [GP76, Saa82, LO83]. **Over-Determined** [DR76]. **Over-Relaxation** [BV68, GV61, PJ84, You70]. **Overdetermined** [BCC78, BCS78, BP75a, Cli76a, Cox81].

Package [Yoh79]. **Padé** [FL70, Loa77a]. **Pair** [Uhl76]. **Pairs** [Sun82]. **Pairwise** [Sor85]. **Parabolic** [Var61]. **Parallel** [AP86, BBD+87, CM88, CKS78, CMR86, CMR88, DI86, DH84, DS84, DS87a, DS87b, Eld88, Eva84, ED83, FF77, FG86, GJM87, GR84, GH85, GHL86, HR88, Hel78, Hoc83, HJ88, Jor84, Jor87, KNP87, KNP88, LC88, Luk78, LO83, MRK76, Meu89, Mod88, ML82, OS85, OS86, OR88, OV85, Ple86, Rod82a, Rod82b, RO88, Sam71, SK78, SHW86, Sto73, Sto75a, Sto75b, Swa79]. **Parallelized** [PJ84]. **Parallelizing** [Sea86]. **Parameter** [GHW79, Huf87]. **Part** [DS58, Fra64a, Fra64b]. **Partial** [Bun74, CGO76, HV88a, HV88b, JS75, Meu89, OV85, Ske81, Var61]. **Partitioned** [Joh71, Var70b]. **Parts** [Fra61, GV61]. **PC** [MLB87]. **PC-Matlab** [MLB87]. **PDFIND** [Cra86]. **Pencil** [Doo79, Ruh78, Uhl76]. **Pencils** [BBI71, Dem83a, DK87, Kåg86, KR83, TW72]. **Pereyra** [Hig87b]. **Performance** [DKH86, DS86, Jor87]. **Periodic** [BG78, BG84a]. **Permutations** [GP74]. **Perturbation** [DK70, Eld80, ES82, Kåg77a, Kat66, Pai79a, Ruh70a, Ste73b, Ste77a, Ste77b, Ste78, Ste79b, Ste79c, Ste84d, Sun83, Wat88, Wed72, Wed73b, Dem87c]. **Perturbations** [AG87, AG88, Sch79, vdS75a]. **Perturbed** [Pai74b, Ste84b]. **Phenomena** [CW80]. **Piecewise** [BCS78]. **Pipeline** [DGK84]. **Pipelined** [HS86]. **Pite** [KR83]. **Pivot** [Coh74, Cry68, Duf74]. **Pivoting** [Bun71a, Bun74, Dav86, DK77, For60, HH89, Ser80, Ske81, Sor85, vdS70]. **pivots** [Cha85]. **Plane** [Giv58, Ham74, Saa86, Ste76c]. **Planes** [Pea01]. **Point** [Mol67, PJ84, Ste81a]. **Points** [Pea01, Ste75a]. **Poisson** [Bun69, BD74, BDGG71, BGN70, DF76, Dor70, Dor73, Hoc65, Hoc83, SS73]. **Polar** [Hig86a, HS88]. **Pole** [MP82]. **Polynomial** [Ash87, FG65, JMP83]. **Polynomials** [Hig88c, Loa78b, PS73, Ris73]. **Poorly** [Var70a]. **Portable** [Blu78, BBD+87, DS87b, Yoh79]. **Posed** [Dem87b, DK88, ES86, OS81, Var73]. **Positive** [AR85, Bar87, BR70, Cra86, CM83, CL86, DI86, GL81a, GL79, Hig88b, MPW65, MPW66, MW65, Nic74, Ris73, dBP77]. **Possessing** [Rei72]. **Power** [PP73]. **Practical** [CKS78, ML82, Pai70, Saa84, Wra75]. **Precision** [Gre81]. **Preconditioned** [Ada85, Axe85, Eis84, Mel87, Meu84]. **Preconditioner** [Cha88]. **Preconditioners** [BPS86a, BPS86b, JMP83, Jor84]. **Preconditioning** [Ash87, CMdP84, CGM85, Osb60, RW84a, RW84b]. **Prediction** [Cyb84, Lev47, Mak75, MG76]. **Presence** [CD87]. **Primatives** [JH87a]. **Principal** [EY39, FH60]. **Principle** [Arn51]. **Principles** [Lin61]. **Priori** [Wil68c]. **Probabilistic** [HS66]. **Probabilities** [GM86]. **Probability** [Dem88]. **Problem** [AGG88, AC76, Arn51, BG78, BG84b, CJ71, Cra73, Cra76, DNT83, Dem87b, Dem88, DS87a, Doo81a, Eld80, ES82, FH72, GL80, GNL79, GUW72, Hig88f, Huf87, Huf88, Kåg85, Kar74, Kau74, Kau77, Kub61, KF64,

Lan50, LPS87, Par80b, PW70b, Rod73, Ruh74, Sch66, Smi67, Ste72, Ste75b, Ste76b, Ste78, Ste79c, Sun83, War81, Wed73a, Wil65a, vdS75b]. **Problems** [Abd71, BNP88, BW73, Bau65, Bjö67b, Bjö84, BPS81, BPS86a, BPS86b, BL85, Cli73, CW86, Cyb84, DK88, Eld77a, Eld83, Eld84, Eld85, ES86, ER80, FU69, FJL+88, Fri75, Fri77, FNO87, FG86, GH80, Gol65, Gol73, GKS76, GP73, GP76, Gup72, HL69, Hig85, Hig88e, HV87, JO71, JO77, KdV77, Kau83, LH69, LH74, Lew77, Loa85c, MW68c, McC72, MS73b, OS81, Pai79a, Pai79b, PS78, PS82a, PR68, Rut58, Sch86, SS79, Sco79a, Ste73b, Ste74, Ste77a, Var73, Dem87c]. **Procedure** [BS70, GH59, OS81]. **Proceedings** [DS78, Hea86, KR83]. **Process** [Bro73, KP76, Pai70, Sch64, Sco78]. **Processes** [SS76, Wil63, Wil68c]. **Processing** [APP88, Cyb78, ML82, Opp78]. **Processor** [AC84, GJM87, Jor87, Luk86b, MRK76]. **Processors** [AP86, Bis88a, BL86, BBD+87, BLL85, DGR79, FJL+88, ISS86, Jor84, LO83]. **Procrustes** [Hig88f, Sch66]. **Product** [Cup83, HLPW86, Win68]. **Products** [BL87, Cup84, SL89]. **Profile** [GPS76a, GPS76b]. **Program** [Blu78, CP77]. **Programming** [AS83, Lue73, LO83]. **Programs** [BBD+87, CW85b, DCHH88a, DS87b]. **Progress** [PR81]. **Projection** [Saa82, vdSV79]. **Projections** [Ste77a]. **Proof** [HP78]. **Propagation** [HS66]. **Properties** [AM65, FU69, Pai81, Ruh70b, SS85b, You70, Doo83]. **Property** [Rei72, You72]. **Proposed** [Ste81a]. **Pseudo** [GK65, GP73, GP76, PW70b, Ste77a, Wed73b]. **Pseudo-Inverse** [GK65]. **Pseudo-Inverses** [GP73, GP76, PW70b, Ste77a, Wed73b]. **Pseudoinverse** [Eld83].

Q [CD74]. **QL** [BMRW68, Dub70, DMW68, HP78]. **QR** [BR68, Bis88b, BBdH86, BMRW68, Bye86, Cha87, CMR86, DGKS76, DT71, Eld88, Fra61, Gen73a, GM86, Gra86, HS86, Hua81, Kar74, Luk86a, MPW70, MRW70, Nan85, Par65, Par66, Par68, PP73, RB68, Ste70, Ste77b, Ste84a, Wat82, Wil65b, Wil68b]. **Quadratic** [AL73, Bai88a, Gan81, GU70, Loi72, PD86, Ruh67, Ruh68, Sch64, Wil84, vK66]. **Quadrature** [GW69]. **Quasicyclic** [Han62, Hen58]. **Queueing** [Kau83]. **Quotient** [Par74b]. **QZ** [Kau77, War75, Wil79].

Random [AOU87, Ste80]. **Rank** [AG87, AG88, AGG88, BNS78, Cha87, Fos86, GKS76, Ste84c, TW70, Wat88, Wed73a, vdSV79, Dem87c]. **Rank-Deficient** [Wed73a]. **Rank-One** [BNS78]. **Rank-Revealing** [Cha87]. **Rate** [Jen77a, vdSdV86]. **Rates** [Saa80]. **Ratio** [GU70]. **Rational** [BR68, RB68]. **Rayleigh** [Par74b, Van71]. **Real** [AR85, BS70, BMPW66, Bud64, CJ70, Cra86, CD74, CW79, Har82, Hig87a, Hig88d, JS75, Mah79, MPW70, MW31, Rut66, Sco85, Ste76a, Uhl73, Uhl76]. **Realistic** [SW80]. **Reasonable** [Yoh79]. **Reconfigurable** [KB84]. **Reconstruction** [GH84]. **Rectangle** [Dor70]. **Rectangular** [BD74, CMR86]. **Recurrence** [Par76]. **Recursive** [APP88]. **Reducing** [BS79, BE68, Bus69, Cut72, Doo83, Ebe70, GPS76a, Han88, Kåg86, TW70]. **Reduction** [Aas71, Cra73, DF76, DHS87, Duf74, DR75, GPS76b, Hel76, Joh84, MW68c, MW68d, RW84a, RW84b, Swe74, Swe77]. **Reductions** [Rei67]. **Refined** [Mei83, PNO85]. **Refinement** [Bjö67a, Bjö68, BG67, GW66, JW77, MPW66, Mol67, Ske80]. **Refining** [Dem87d]. **Reflections** [Par71]. **Reflectors** [SP87].

Regions [BD74, BDGG71]. **Regression** [GWM76, Ste77c, Ste87]. **Regular** [FJL+88, Geo73]. **Regularization** [Eld77a, Eld77b, Eld84, Han87, OS81]. **Regulator** [AC76]. **Related** [MW68c, O'L80a, Pai81, Wil65b]. **Relations** [AR85, Hot57, TW72]. **Relative** [Pry84]. **Relaxation** [BV68, GV61, PJ84, Sch74, You70]. **Reliability** [Dem84]. **Reliable** [Enr79, HVH87]. **Reorthogonalization** [DGKS76, Pai70, Sim84]. **Representation** [BL87, SL89, SS76]. **Research** [Duf77]. **Residual** [KPJ82, SS86, Ske81]. **Résolution** [GM83]. **Response** [Lau81]. **Restoring** [vdSV79]. **Restricted** [AGG88]. **Restructuring** [BG84a]. **Result** [Pai84]. **Revealing** [Cha87]. **Review** [Mak75]. **RGSVD** [Kåg86]. **Riccati** [AL84, Bye83, Doo81b]. **Richardson** [GO88, GV61]. **Ridge** [GHW79]. **Right** [OP64, Saa87]. **Rigorous** [Var68b]. **Ring** [BL86, ISS86]. **RMS** [Lev47]. **Root** [BH83, GWM76, Hig86c]. **Roots** [Gen73b, Hig87a, Hou68, Sch09, TW72]. **Rotation** [APP88, DK70, Ham74, Luk86a]. **Rotations** [DI86, GH80, Giv58, PT57, Rat82, Ste76c]. **Rounding** [Boh75, Kie87, Ste79a, Wil63]. **Roundoff** [Abd71, HS66, LS78, MS78, Woz80]. **Routine** [Cra86]. **Routines** [DH84, GBDM72, KL88, KW87, SBI+70]. **Row** [Bau65, Duf74]. **Rowwise** [PJ84]. **Rules** [GW69].

Säculärstörungen [Jac46]. **Sample** [AC76]. **Sample-Data** [AC76]. **Satisfy** [Asp59]. **Scale** [BPS81, CW86, OS81]. **Scaled** [Bau63, Bus68, FL74, Ste84a]. **Scaling** [GV74, Ske79, Ste84b]. **Scattered** [CM88]. **Scheduling** [OS86]. **Scheme** [NV75, Ple86, dV82a]. **Schemes** [KdV77]. **Schmidt** [Abd71, Bjö67b, DGKS76, Ric66a, Ruh83]. **Schur** [BH83, Cot74, GNL79, KW87, PL81, Ste85]. **Scientific** [Sch87]. **Scientists** [Jen77b]. **Second** [FG65, GV61, Ort72, Ort88, Ste84d]. **Second-Degree** [FG65]. **Second-Order** [GV61]. **Sectioning** [Jen72]. **Selection** [Duf74, HV87]. **Selective** [PS79]. **Self** [GK69]. **Semi** [EN83, GV61, Hig89]. **Semi-definite** [Hig89]. **Semi-Iterative** [GV61, EN83]. **Semidefinite** [Hig88b]. **Seminormal** [Bjö87]. **Seminumerical** [Knu81]. **Seminumerical-Algorithms** [Knu81]. **Sense** [BCC78]. **Sensitivity** [GM86, Loa77b, Pai84, Ste72, Ste77c]. **Separable** [GP76]. **Separate** [GP73]. **Separation** [Var79]. **Sequence** [Gup72]. **Series** [Dur60]. **Set** [CR83, DCDH88, DCHH88a, DCHH88b]. **Sets** [Var70b]. **Several** [Cli76b, Cut72, GPS76b, Saa87]. **Shapes** [JH87a]. **Shared** [GHL86, JH87a, KNP88]. **Shift** [BR68, RB68, War75]. **Shifted** [DT71, Man79]. **Shifts** [Hua81, Ste70, Wil68b]. **Short** [Dub70]. **Should** [KP76]. **SIAM** [Hea86]. **Sided** [Bis87, Nas75]. **Sides** [OP64, Saa87]. **Signal** [APP88, Cyb78, Opp78]. **Signals** [DJK+88]. **Similarity** [DR75, MW68d, Rat82, Ruh69b]. **Simple** [SW80]. **Simplex** [Bar71]. **Simplification** [JY83]. **Simultaneous** [CJ70, CJ71, Cul78, JO71, JS75, Rut69, Rut70, Ste75c, Ste76d, Uhl73]. **Single** [Ker82]. **Singular** [AK75, Bai88a, Bar87, BS86, Bis88a, BL85, BLL85, BGG88, BG69, BN87, Cha82a, Cha82b, Cha84, CVD88, CWL83, Cup83, Don83, Doo79, Eld83, GK65, GLO81, GR70, Ham85, HN81, HVH87, Kåg85, Kåg86, Kar74, Loa73, Loa76, Loa85a, Luk80, Luk86b, MM83, Nas75, Pai85, Pai86, PD86, PS81, Par66, Ruh75, Sch86, Ste79b, Ste81b, Ste83, Ste84a, Ste84d, Sun83, Var75, Wed72]. **Size** [Coh74, Cry68, Ske81]. **Skew** [Buc74,

Buc77, Bun82, KdV77, Paa71, WG78]. **Skew-Symmetric** [Buc74, Buc77, KdV77, WG78]. **Slowly** [Sco79b]. **Small** [CDH84, Ste84d, Cha85]. **Smallest** [Bar87, Cul78, HVH87, Var75, Wat88, Dem87c]. **Social** [SS76]. **Software** [AL84, Dem84, Hoa77, KMN88, MS78, Ric81, Sco79a, Yoh79]. **Solution** [Abd71, Arn51, Axe77, BCS78, BP75a, BS72, BW73, Bjö67a, Bjö68, Bjö88, BP70, BE68, BMPW66, BL85, Buc77, BD74, BDGG71, Cal86, Cli73, Cli76a, CG73, CGO76, Cox81, DI86, DF76, Dor70, Dor73, DR76, Ebe70, Enr79, ER80, ED83, FM67, GP70, GH80, GL81a, GW66, Gup72, HR88, Hig88c, Hoc65, Huf88, Jen72, Joh84, Ker82, Kog55, Kub61, KF64, LV75, Lan50, Lan70, MPW66, MW67, MdV77, ML82, OV85, Pai74a, Pai79a, PS75, PR70, Rei67, Rei71b, RO88, Ruh78, Rut58, Sch66, SS79, She55, Sto73, SS73, Und75, Var72, Var73, Wac66, WAC$^+$88, You71]. **Solutions** [BG67, BG65, Cha84, CP76, CR79, DK88, GR70, Hig88a, OP64, Vet75, vdS75b]. **Solve** [Kau74]. **Solver** [Bun69, Hoc83, LC88]. **Solvers** [CKS78, DKH86, DS84, Joh86, SK78, Sto75a, Sto75b]. **Solving** [ADD88, AL85, BCC78, BG76, Bau65, Bjö67b, Bun76, Bun85, BK77, BP71, BGN70, CMdP84, Doo81b, EHHR88, GP71, Gol65, GO88, HL69, HS52, Hig87b, Joh85, Joh87b, KNP87, KNP88, KW87, KB84, Kau77, LH69, LH74, MP74, Pai73, Par80a, Ros69, Saa81, Saa82, Saa84, Saa87, SS86, Sch86, Ste73a, Swa79, Swe77, Var61, WZ72]. **Some** [BS68, Bro73, BK77, Cyb78, DS84, DSS86, DR76, FL74, FU69, Gol73, Gol74, Hel76, Kan66, Kau77, Kub61, Loa83, Par74b, Saa84, Saa86, Wil77, dV82b]. **SOR** [Eva84, Nic74, Ruh74]. **Space** [Fos86, Pea01]. **Spaces** [AM65, Hal58]. **Sparse** [ADD88, Bun76, BR76, Cul78, CD74, CW79, Duf74, Duf77, DER86, DR75, DR76, DS78, ER74, ER80, Geo74, GH80, GL81a, GPS76a, GM76, GL81b, HS86, Kau79, Kau87, Lew77, Luk78, Pai71, PS75, PS78, PS82a, PS82b, Rei71b, RW72a, Ruh74, Ruh79, SLN75, Ste76b, Und75]. **Special** [Ros69, vK66]. **Specified** [CW79, PW71]. **Spectra** [Kah75]. **Spectral** [AG87, AG88, Des63, ER80, GH84, Hen62]. **Spectrum** [CW79, Jen77a, Ste75a]. **Speech** [MG76]. **Speed** [Bai88b, Hen58, Pan84, PT57]. **Sphere** [FG65]. **Spread** [Sco85]. **Square** [BH83, CM88, Eld77b, Gen73b, Hig86c, Hig87a]. **Squares** [Abd71, APP88, BNP88, Bau65, Bjö67a, Bjö67b, Bjö68, Bjö84, BG67, BG65, Cli73, Cox81, Cyb84, Eld77a, Eld80, Eld83, Eld84, Eld85, Gan81, Gen73b, GH80, Gol65, GKS76, GL80, GP73, GP76, GR70, GW66, GWM76, HL69, Huf87, Huf88, HV87, HV88a, HV88b, JO74, Kar74, KP81, LH69, LH74, Lin61, Loa83, Loa85c, Pai79a, Pai79b, PS78, PS82a, PS82b, PW70b, Ple74, PR68, Rei67, Saa86, SS79, Ste77a, Ste87, Wed73a, vdS75b, Dem87c]. **Squeezing** [DE84, DKH86]. **Stability** [Bjö87, Bun85, Bun87, Bus71a, Cyb80, Cyb84, Dem87a, Elm86, ER74, JW77, Mil75, Rei71a, Ske79, Ske80, TS87, vdS75b]. **Stabilization** [Bar71]. **Stable** [Bun82, BK77, Bus71b, Cra76, DGKS76, DK87, GH84, Loa85b, Pai79b, SK78, Var61]. **Staircase** [Fou84]. **Standard** [MW68c, Ste81a]. **STAR** [LV75, NV75]. **STAR-100** [NV75]. **State** [IP87, JP71]. **Stationary** [FG65, GM86, GU70]. **Statistical** [Gol69, Hot57]. **Statistics** [Coc68, Ham85]. **Step** [McC72, Ada85, NV83]. **Stewart** [Sun82]. **Storage** [Mer85, SL89, Ste76c]. **Straight** [Mad59]. **Strapdown** [BI75]. **Stratagem** [CM88]. **Strategies** [Bun74, Cut72]. **Strategy** [Buz86]. **Strong** [Bun87]. **Structural** [BW73, Ple86]. **Structure** [Cox81, Gre52, Kåg86, Ruh69a]. **Structures** [Vet75]. **Study** [Loa75b]. **Sturm** [Gup72].

Style [Bye84]. **Subject** [AG87, AG88, GU70, Mad59]. **Submatrix** [Wat88, Dem87c]. **Subprograms** [DCHH88a, LHKK79a, LHKK79b, DCDH88, DCHH88b]. **Subroutines** [Ste76a]. **Subsequent** [SS79]. **Subset** [HV87]. **Subspace** [HVH87, Saa81, Saa84]. **Subspaces** [BS79, BG73, Dem87d, Doo83, GLR86, Kåg86, Ruh70a, Ste71, Ste73b, Ste76d, Var70a]. **Substitution** [Sch09]. **Substructuring** [BPS86a, BPS86b]. **Successive** [BV68, GV61, PJ84]. **Sufficient** [FM84]. **Suitable** [AP86]. **Sulle** [Bel73]. **Summability** [NV83]. **Sun** [Pai84]. **Supercomputers** [Mel87]. **Survey** [Axe85, Duf77, Hel78, Hig87c, MM64]. **SVD** [BL86, CD87, Han87, HLPW86, Loa83]. **Sweeps** [Han88]. **Sylvester** [KNP87, KNP88, KW87]. **Symmetric** [Aas71, AL73, AL76, AGG88, BG76, BMW67, BR68, BS70, BBI71, BS86, BMRW68, BL85, Buc74, Buc77, Bud64, Bun71b, Bun74, Bun82, BG84b, BGG88, BK77, BKP76, BNS78, BP71, Bus71b, CJ70, Cra73, Cra86, Cul78, CD74, CW79, CW85b, CW85a, Cup81, CL86, DK77, DNT83, DI86, DS87a, Dub70, Ebe71, ER80, Fle76, GUW72, Hig88b, Hig88f, Jen72, KP74, KdV77, KM86a, LPS87, Mah79, MPW65, MRW70, MW65, MW67, MW68a, MW68c, MdV77, Mir60, Paa71, Pai70, Pai76, Pai80, Par80a, Par80b, PR70, PR81, PW69, PT57, RB68, Ruh79, Rut66, Rut70, Saa87, SLN75, Sch68, Sco78, Sco79a, Sco84, Sco85, Sea69, Ser80, Sim84, Ste70, Uhl73, Uhl76, Und75, WG78, You70]. **Symplectic** [Bye83, Loa84]. **System** [AL85, BCS78, BP75a, Bis88a, DS84, Doo81a, Joh86, MPW66, ML82, PR70, Rei67, SK78, Sto73, dV77]. **Systèmes** [GM83]. **Systems** [ADD88, Axe77, Axe80, Axe85, BCC78, BG76, Bis88b, BE73, BP70, Boh75, BMPW66, Buc77, Bun76, Bun85, BK77, BP71, Cha84, Cha88, CKS78, CS87, Cli76a, CP76, CR79, Cyb80, DJK+88, DI86, DR76, EHHR88, Enr79, ED83, FM67, Fou84, GJMS88, GP70, GP71, Geo74, GL81a, GL79, GO88, HR88, Hel76, HS52, Hig87b, Hig88a, Hig88c, ISS86, JY83, Joh84, Joh85, Joh87b, JH87b, KB84, Ker82, LV75, MP74, Man77, MdV77, MP82, ML82, NV83, OR88, PS75, Par80a, Rei72, Rob77, RO88, Ros69, Ruh78, Saa81, Saa82, Saa84, Saa87, SS86, Ste73a, Ste81b, Swe77, Var72, Var73, Wac66, WAC+88, Wid78, You71, dBP77, vdS70]. **Systolic** [ES86, GK82, HI83, Kun82, Sch86, ST86, SHW86].

Tales [GP76]. **Taxonomy** [AMS88]. **Tchebychev** [Man77]. **Techniques** [BCS78, DK77, FJL+88, Kan66, KB84]. **Test** [DCHH88a]. **Tests** [HS66]. **Their** [FU69, RW72a]. **Theorem** [FV62, GHS88, Sco85, Sun82]. **Theorems** [BF60a, BF60b, ES82, Joh71, Kah67]. **Theoretical** [AGG88, Wra73]. **Theorie** [Jac46]. **Theory** [BV68, CW85a, DK88, Doo81a, Eld80, Gan59a, Gan59b, GK69, Hou74, Kat66, LT85, Lin61, Loa82, MM64, Nic74, NV83, Ort88, PP73, Ric66b, Sch09, SP87, Ste75b, Ste78, TW72, TA61, Wed73b]. **Thoughts** [Kau77]. **Three** [CR83, Dem87d]. **Time** [AC84, Dur60, MP82]. **Toeplitz** [BBdH86, Bun85, Cha88, Cyb80, CL86, Ris73, Tre64, Tre74, Wat73, Zoh69]. **Topological** [SS85b]. **Torus** [FG86]. **Total** [GL80, Huf87, Huf88, HV87, HV88a, HV88b, Dem87c]. **Totally** [dBP77]. **Tour** [Ste76b]. **Tracking** [PR81]. **Transformation** [BR68, BG67, EY39, ER80, Fra61, Kau87, Nas75, Pry85, Ruh69b, Rut58, Tsa75]. **Transformations** [AM65, BG65, Dem83a, DR75, Fro65, Gen73a, Gen73b, Kau79, MW31, RB68, SL89, Wal88]. **Transforming** [Giv58]. **Transition** [JP71]. **Transposition** [JH88]. **Trapezoid** [Lem73]. **Treatment** [Ste74, dV77]. **Trees** [ER88]. **Trench** [Zoh69]. **Triangular** [AK75, Bre70, CKS78, Cup84, EHHR88,

ER74, ED83, Giv58, HR88, Hig87c, Hig88a, KNP87, KNP88, Lem73, LC88, Luk86b, ML82, Par74a, Par76, Phi71, Ris73, RO88]. **Triangularization** [Fro65, GK82, Hou58]. **Triangularizing** [Hua75]. **Tridiagonal** [Aas71, BMW67, BR68, Bus71b, Dub70, FU69, Hel76, HP78, Joh84, Joh87b, JH87b, KB84, Ker82, KM86a, LV75, LPS87, MP74, RB68, Ros69, Ste70, Sto73, Sto75a, Sto75b, Swa79, Swe77, Var72, Wil68b, Hig86b]. **Tridiagonalization** [CM88, GP74, MW68a, Sch68]. **Tridiagonalizing** [Pai76]. **Tridiagonals** [Mer85, PNO85]. **Truncated** [Han87]. **Truncation** [Kar74]. **Tutorial** [Mak75]. **Two** [Bis87, Bud64, Cra86, CM83, Fro65, HLPW86, Uhl73, Var79, Dem87a]. **Two-Dimensional** [Fro65]. **Two-Sided** [Bis87]. **Type** [AL76, Axe80, BE68, Ebe70, GP71, Hua75].

Unconstrained [DS83, Gol76]. **Undamped** [JO71]. **Underdetermined** [AL85, CP76]. **Underflow** [Dem84]. **Undersized** [Sch86]. **Understanding** [Wat82]. **Unicomputers** [Hoc83]. **Uniform** [Cli76a]. **Uniprocessor** [Cal86]. **Unit** [FG65]. **Unitarily** [Mir60]. **Unitary** [AM65, Fra61, Fro65, Giv58, Gra86, Hou58]. **Unrolling** [DH79]. **Unstable** [Loa85b]. **Unsymmetric** [Axe80, CJ71, GWDF88, GL79, JO77, MW67, Saa81, Saa82, You70]. **Updating** [Bjö84, Cup84, DGKS76, PNO85, ST86]. **Upper** [Ste76a]. **Usage** [LHKK79a, LHKK79b]. **Use** [Cli76b, CG73, DD88, DGR79, GJM87, Huf87, Pai70, PNO85, Rei72, Saa84]. **Used** [RW72b]. **User** [Mol80]. **Users** [DBMS78, MLB87]. **Uses** [Gol74]. **Using** [Bre70, BLL85, CM88, CGP76, DH86, Ebe87, ER88, Fos86, GWDF88, GH80, GM86, Hoc65, HV87, JH87a, Loa82, PT57, SHW86, Sea69, Wal88].

Validation [Eld85, GHW79]. **Value** [AK75, Bai88a, Bar87, BS86, Bis88a, BL85, BLL85, BGG88, BG69, Cha82a, Cha82b, CVD88, Cup83, FU69, GR70, Ham85, HN81, Kåg85, Loa76, Loa85a, Luk80, MM83, Nas75, Pai85, Pai86, PD86, PS81, Sch86, Ste83, Ste84a, Sun83, Var75, Wed72]. **Values** [CWL83, Don83, Eld83, FG65, FH60, GK65, GLO81, GU70, Hen62, HVH87, Loa73, Lot56, Luk86b, Ruh75, Ste79b, Ste84d]. **Vandermonde** [BE73, BP70, GP70, GP71, Gau75a, Gau75b, GT81, Hig87b, Hig88c, TG81, dV77]. **Vandermonde-like** [Hig88c]. **Variable** [Gol76]. **Variables** [GP73, HV87, Mad59, Ste77c]. **Variant** [dV82b]. **Variation** [Hen62]. **Vector** [AP86, Bis88a, Blu78, DGK84, DGR79, Hal58, Jor84, MRK76, Mel87, Meu84, OV85, PO87, Sch87, Vet75]. **Vectorizable** [dV82b]. **Vectorization** [Buz86, Ker82]. **Vectors** [BN87, CWL83, GLO81, Pry84, Ruh83, Ste84b]. **Verfahren** [Jac46]. **Very** [Pai71, Ruh70b, Wil72]. **VF** [DD88, KL88]. **VF/400** [KL88]. **Vibration** [JO71]. **VLSI** [CS87]. **Vol** [FJL+88]. **Volume** [CW85b, CW85a]. **vorkommenden** [Jac46].

W.F [Zoh69]. **Ways** [ML78]. **Weak** [Bun87]. **Weighted** [Bau65, Eld83]. **Weighting** [AC76, Loa83, Loa85c]. **Weiner** [Lev47]. **Which** [Asp59, Bus68, MdV77, Dem87c, Wat88]. **Whose** [GP73, PR70]. **Winograd** [Bre70]. **Without** [Gen73b, Ser80, CP77, Fos86]. **WR** [Rut58]. **WY** [BL87, SL89].

X [CDH84, DH86, Sea86]. **X-MP** [Sea86]. **X-MP-2** [CDH84]. **X-MP-4** [DH86].

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