

A Bibliography of Numerical Analysis Publications, 2000–2009

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/>

08 August 2024
Version 1.54

Title word cross-reference

10×10 [BLWW07]. R^n [CL02].

-Digit [BLWW07].

100-digit [BLWW04].

2001 [BBCM03]. **2003** [FDKN04]. **2005** [IL07]. **2007** [DFM⁺07]. **2nd** [Atk05].

3rd [Atk05].

4th [BBCM03].

50th [DFM⁺07]. **5th** [Dim03, FDKN04, IL07].

6 [BB02, EKH02, HL01, Pal01].

7 [EMK04, EKM05, HL05, Pal05]. **75th** [DFM⁺07].

Accuracy [Ein05a, Ein05b, Hig02, BLWW04]. **Acta** [Ise04]. **Adaptive** [Lan00]. **Advanced** [FDKN04, KP00, Ric02, BBCM03, EM07]. **Advances** [LBQ00]. **Algebra**

[Hog07, EM07, FH05, HvdV00, Mey00, Rob05, Ste04, Str09]. **algebraic** [ARRY01, BDDR00]. **algorithm** [Lan00]. **algorithmic** [Gri00, GW08]. **Algorithms** [CG05, Hig02, KK02, Ste01, Gal00, Meu06, IL07]. **along** [BLWW07]. **Analysis** [Atk05, CL02, Fau08, Hou06a, Hou06b, Kam00, Neu01, Rit00, SM03, Var09, VWY01, Whi04, AC01, All07, AH04, BPMB00, Bau00, Bur05, CR00, Cha08, Dat04, Epp02, GW04, HvdV00, Ips09, Ise09, Kar01, KC02, KC09, Lea04, LVW05, Mey00, Moi01, MKC09, Nak02, Rah05, RR01, Sch02, SB02, Var00, Zar04, vDHvdV00]. **Analytic** [Dor00]. **analytical** [BTM09, Dub03, Goc02]. **anniversary** [DFM⁺07]. **application** [Kom03].

Applications

[CG05, FDKN04, vR01, Ser02, VWY01, Zha05, BBCM03, Che05, Dim03, Gil04, Gil05, GS08, Lan00, LVW05, Rec00, Rob05, RLM06, Tra00, Van00b].

Applied

[Cha05, Fau08, GW04, Rah05, Rao02, SH00, YCCM05, Anc02, Mey00].

Approach [GK05, KK02, KG01, Anc02, Bis04, Dor00, KG06, Sha06, Sha09, TW05, Van00a]. **Approximating** [ES00]. **Approximation**

[IL07, Gal08, ZM06]. **Arithmetric** [Ove01]. **arrival** [DFM⁺07]. **Art** [DFM⁺07, PTVF07]. **August** [Dim03, FDKN04]. **Average** [Rit00].

Average-Case [Rit00].

based [Bra02, Bra06, CHT02]. **beginners** [HLR01, HLR06]. **BEMLIB** [Poz02]. **Bibliographic** [Yos02]. **Bifurcations** [Gov00]. **biology** [Har01]. **birthday** [DFM⁺07]. **Borovets** [Dim03]. **boundary** [AB01, Car01, Poz02]. **BSP** [Bis04]. **Bulgaria** [Dim03, LVW05, VWY01].

C [Mei05, Flo00, KK02, SH00, Sha06, Sha09, SHHS04]. **C.** [Mei05].

Calculation [Kin07]. **Carlo** [ES00]. **Case** [O'L09, Rit00]. **CD** [Dak06].

celebrating [DFM⁺07]. **Challenge** [BLWW07, BLWW04]. **chemistry** [Har01]. **Chester** [IL07]. **Circles** [Var04]. **codes** [GH01]. **cognitive** [ABC06]. **Commentaries** [CGO07, Gol07]. **Complement** [Zha05]. **complex** [Gal08]. **comprehensive** [HL01]. **Computation**

[CGO07, Hig08, AB01, Bis04, CR00, Gol07, Kap04, Lea04, PF05].

Computational [Anc02, DFM⁺07, Gen02, Har01, Lan08, vR01, Str07,

Whi04, DJKP07, KS05a, KS05b, Sha09, TW05, Van00b]. **Computations**

[GK02, Lys03, VvBM08, Wat02, Eat00, Eat02, Eat05, EBH08, GV07, Meu06].

Computer [EM07, Zar04]. **computers** [BT06]. **Computing**

[AGM04, DB08, DFM⁺07, Ein05a, KK02, Law05, Mak03, O'L09, Ove01,

PTVF07, Yos02, BLWW04, CGL03, CL02, CHT02, DJKP07, DB02, Ein05b, GH04, Gra07, Hei06, KC02, KC09, Kle09, LWA⁺05, LBQ00, LW03, MR01, Mol04, Mol08, QS03, QS06, RLM06, SHHS04, Tur00, Tur01, Van00a, Whi07].

Concise [Pla03]. **Conference**

[BBCM03, Dim03, FDKN04, IL07, VVY01, DFM⁺07, LVW05]. **conjugate** [Meu06]. **Continuum** [RLM06]. **control** [Dat04]. **Course** [Kam00, AR06, Ise09, LWA⁺05, RR01]. **Cruncher** [Mak03]. **Current** [CGL03]. **Curves** [Gal00].

data [Cha08, Eld07, Kle09]. **demystified** [McM07]. **derivatives** [Gri00, GW08]. **design** [Dat04, Dor00]. **deterministic** [ES00]. **Differential** [Ban01, BPMB00, Bau00, BT06, CKO02, DB02, Goc02, Ise09, KA03, LT03, Lar05, MR01, Sta05b, TW05]. **differentiation** [Gri00, GW08]. **Digit** [BLWW07, BLWW04]. **Direct** [Dav06, Kin07]. **Directions** [DFM⁺07]. **Dynamical** [Gov00].

economics [Bra06]. **Edition** [Atk05, Eat00]. **Eigensystems** [Ste01]. **Eigenvalue** [CG05, Kre05, BDDR00, Wat07]. **Einführung** [Mei05]. **electrical** [Zar04]. **Electrodynamics** [vR01, Van00b]. **electromagnetics** [StM05]. **Element**

[BS08, AB01, BS01, BG09, Car01, DK01, KB00, Poz02, ZT00, Zim04]. **Elementary** [AH04, Atk05, CKO02]. **Elements** [Gen02, Whi07, ZM06]. **Elliptic** [Kin07, KA03]. **emphasis** [AC01]. **Engineering** [Kiu05, Lys03, Urr01a, Anc02, Moi01, Str07, Urr01b]. **Engineers** [Rao02, Ant02, BB02, Cha00, Cha02, Cha05, CC06, Dub03, GS08, Hah02, Pal01, Pal05, SH00, Zar04]. **entlang** [BLWW07]. **ENUMATH** [BBCM03, FDKN04]. **equation** [Mai00, Mei05]. **Equations** [CL02, BPMB00, Ban01, Bau00, BT06, CKO02, DB02, Goc02, Ise09, KA03, LT03, Lar05, MR01, Sta05b, TW05]. **Equilibria** [Gov00]. **Essential** [Hah02]. **European** [BBCM03, FDKN04]. **Evaluating** [Gri00, GW08]. **evolution** [Kom03]. **examples** [Rob05]. **Exercises** [Liu06, Ove01]. **experienced** [HLR01, HLR06]. **Exploring** [LW03].

Facts [Ber09]. **feedback** [Dor00]. **finance** [Bra02, Bra06]. **Finite** [AB01, BS08, LeV02, ZM06, BS01, BG09, DK01, KB00, Meu06, ZT00, Zim04]. **First** [Kam00, Ise09, LWA⁺05, RR01]. **Floating** [Ove01]. **fluids** [CL02]. **foray** [BLWW07]. **Formulas** [Ber09]. **Forsythe** [DFM⁺07]. **Fortran90** [LWA⁺05]. **Fourier** [Kam00]. **Functions** [GST07, Hig08, Kin07]. **Fundamentals** [Moi01, Wat02, RLM06]. **Future** [DFM⁺07].

gems [PF05]. **Gene** [DFM⁺07, CGO07, Gol07]. **General** [Kre05, PF05]. **general-purpose** [PF05]. **Generalized** [CM09]. **geometric** [Gal00, IQF02]. **geometry** [FH05]. **George** [DFM⁺07]. **German** [Mei05, BLWW07]. **Gersgorin** [Var04]. **Gleichungssysteme** [Mei05]. **GNU**

[Eat00, Eat02, Eat05, EBH08, GDT⁺02]. **Golub** [DFM⁺07, CGO07, Gol07]. **GPU** [PF05]. **GR** [Wat07]. **gradient** [Meu06]. **graphic** [LWA⁺05, Nak02]. **graphical** [Ban01]. **graphics** [PF05]. **Guide** [BBD⁺01, HH00, Mak03, Tur00, Tur01, Yos02, EM07, HH05, HLR01, HLR06, Poz02].

H [CGO07, Gol07]. **Handbook** [CL02, Hog07, KS05b]. **heat** [Mai00]. **high** [BLWW04, Eat00, Eat02, Eat05, EBH08, PF05]. **high-accuracy** [BLWW04]. **high-level** [Eat00, Eat02, Eat05, EBH08]. **high-performance** [PF05]. **Hundred** [Ove01]. **hyperbolic** [LeV02].

IEEE [Ove01]. **II** [Ste01]. **III** [HvdV00]. **implementation** [Bes01, Mei05]. **implementations** [Rec00]. **Implementierung** [Mei05]. **Including** [Ove01]. **integral** [BPMB00, Mai00]. **Integrals** [Kin07, ES00]. **integration** [KS05b]. **intensive** [GH01]. **interactive** [Anc02, Eat00, Eat02, Eat05, EBH08]. **International** [Dim03, IL07, VVY01, LVW05]. **Internet** [Tra00]. **interpolation** [Dor00]. **interval** [MKC09]. **Introduction** [Abe07, Atk05, EKH02, EMK04, EKM05, Flo00, GK05, KG01, Law05, MKC09, Neu01, Pal01, Pal05, Sta05a, Sta05b, SB02, Str09, SM03, TW05, Van00a, All07, Att09, Bes01, Bra02, Bra06, DJKP07, Epp02, Gil04, Gil05, GS08, Han08, Har01, Kap04, KG06, LW03, Mei05, OD05, Sch02, Zar04]. **Introductory** [DK01]. **Inverse** [CG05, KS05a]. **Inverses** [CM09]. **Ischia** [BBCM03]. **Issues** [AGM04]. **Itanium** [CHT02]. **Itanium-based** [CHT02]. **Iterative** [GK02, Saa03, Var09, Var00].

Java [Bes01, LWA⁺05, Mak03, SHHS04]. **journey** [CR00]. **July** [BBCM03, IL07, LVW05]. **June** [LVW05, VVY01].

Krylov [Wat07].

LabVIEW [Tra00]. **Lanczos** [Kom03, Meu06]. **language** [Eat00, Eat02, Eat05, EBH08]. **LAPACK95** [BBD⁺01]. **learning** [Dak06]. **Least** [BG09]. **Least-squares** [BG09]. **lectures** [IQF02]. **level** [Eat00, Eat02, Eat05, EBH08]. **Library** [GDT⁺02, Poz02]. **Linear** [CM09, Hog07, Rob05, Dat04, Dav06, FH05, Mei05, Mey00, Saa03, Str09, Van00b, HvdV00, vR01]. **linearer** [Mei05]. **Lösen** [BLWW07].

Manual [GDT⁺02, EBH08]. **Maple** [AR06, CKO02, GH04, LWA⁺05, Ric02]. **March** [DFM⁺07]. **Mastering** [HL01, HL05]. **Mathematica** [Bau00, Dub03, LWA⁺05, MR01, RLM06]. **Mathematical** [AW05, BS08, CR00, Sha09, All07, AR06, KP00, Liu04, Liu06, MR01, Ric02, Sch02]. **Mathematics** [Ber09, DFM⁺07, FDKN04, Whi04, BBCM03, KC02, KC09, Pla03, QSS00]. **MATLAB** [Mei05, Atk05, Att09, BB02, Bra02, Bra06, Cha00, Cha02, Cha05, Dak06, DJKP07, DS05, EMK04, EKM05, Fau08, GH04, Gil04, Gil05, GS08,

GK05, Hah02, HL01, HL05, Her01, HH00, HH05, HLR01, HLR06, Kar01, KG01, KG06, KB00, LW03, Lys03, MF04, McM07, Mei05, Mol04, Mol08, Nak02, OD05, Pal01, Pal05, QS03, QS06, Rec00, SH00, SD02, Sta05a, Sta05b, Tre00, Van00a, Whi04, YCCM05, EKH02, Kiu05, Kun04, Law05, PL00].

MATLAB-based [Bra02, Bra06]. **MATLAB-Implementierung** [Mei05].

MATLAB(R) [BTM09, Whi07]. **Matrices**

[Hig08, Hou06b, Ser02, VvBM08]. **Matrix**

[Ber09, CGO07, Che05, Eld07, GK02, GV07, Mey00, Ste01, VvBM08, Var00,

Var09, Wat02, CR00, Gol07, Ips09, Van00a, Wat07, Whi07]. **mechanics**

[RLM06]. **method** [BS01, Car01, DK01, Kom03, KB00, ZT00]. **Methods**

[AW05, BS08, DB08, Flo00, GST07, GK02, Gov00, GK05, KG01, Kiu05,

Kre05, Liu04, Rao02, vR01, Tre00, Urr01a, Whi04, Abe07, ARRY01, Anc02,

Ant02, AR06, Ban01, Bes01, BTM09, BG09, Bra02, Bra06, Cha05, CC06,

CL02, DB03, Dat04, Dav06, Dim03, Dub03, Eld07, Epp02, ES00, FB03,

Gar00, GS08, Goc02, Har01, Hei06, KP00, KG06, KA03, KS05b, LT03, Lar05,

LeV02, LW03, Liu06, MF04, Mei05, Mon01, OD05, PL00, Poz02, Rec00, Ric02,

Saa03, StM05, SH00, Sha06, Urr01b, Van00b, Wat07, YCCM05, Zim04].

Milestones [CGO07, Gol07]. **mining** [Eld07]. **Modeling**

[Kle09, EM07, Gal00, LWA⁺05, Whi07]. **modelling** [All07, IQF02, Zim04].

Models [Whi04]. **modern** [Mei05]. **moderne** [Mei05]. **Monte** [ES00]. **MPI**

[Bis04, KK02, Whi04]. **multigrid** [BHM00]. **multilevel** [Lan00].

multiresolution [IQF02].

NAA [LVW05, VWY01]. **NMA** [Dim03]. **nonlinear** [AC01, Lan00]. **notes** [IQF02]. **Number** [Mak03]. **numeric** [LWA⁺05]. **numerica** [Ise04].

Numerical

[All07, AGM04, Ant02, Atk05, BPMB00, BTM09, Bra02, Bra06, BBCM03, BT06, Bur05, CC06, CL02, DB03, DB08, Dat04, DFM⁺07, Dub03, FB03, Fau08, FDKN04, Flo00, Gar00, GST07, GS08, Gov00, Gra07, GK05, HvdV00, Hei06, Hig02, Hou06a, Hou06b, Ips09, Kar01, KG01, KC02, KC09, Kin07, Kiu05, KA03, Kre05, Lea04, Mak03, MF04, Mol04, Mol08, Mon01, Nak02, Neu01, NW06, Ove01, PL00, PTVF07, QSS00, Rao02, Rec00, vR01, Rit00, Sch02, Ste04, SM03, Urr01a, Urr01b, Van00b, vDHvdV00, Abe07, AC01, AH04, Ban01, Bes01, BLWW04, BLWW07, Cha05, Eat00, Eat02, Eat05, EBH08, Epp02, GW04, Goc02, Ise09, KG06, LT03, Lar05, LW03, Moi01, OD05, Pla03, Rah05, RR01, StM05, SH00, Sha06, Sta05a, Sta05b, SB02].

numerical

[YCCM05, Zar04, BBCM03, Dim03, FDKN04, LVW05, Mei05, VWY01].

numerically [GH01]. **Numerik** [Mei05]. **numerischer** [BLWW07].

Object [Bes01, Sha06, Sha09]. **Object-oriented** [Bes01, Sha06, Sha09].

objects [Sha09]. **Octave** [Eat00, EBH08, Eat00, Eat02, Eat05, QS06]. **One**

[Ove01]. **Optimization** [NW06, All07, GH01]. **ordinary**

[DB02, MR01, Sta05b, BPMB00]. **oriented** [Bes01, Sha06, Sha09].

Papers [Dim03, VWY01, LVW05]. **parabolic** [KA03, Lan00]. **Parallel** [Bis04, KK02, BT06]. **part** [CL02]. **Partial** [Goc02, LT03, Lar05, BT06, KA03, Sta05b, TW05]. **pattern** [Eld07]. **PDE** [Lan00]. **PDEs** [Sha06]. **Performance** [GH01, PF05]. **Physicists** [AW05]. **physics** [Anc02, Gar00, Har01, KP00, Liu04, Liu06]. **Point** [Ove01]. **polynomial** [Ste04]. **polynomials** [Gal08]. **Practical** [FH05, vR01, Att09, Poz02, Van00b]. **Prague** [FDKN04]. **precise** [Abe07]. **precision** [Meu06]. **preconditioning** [Che05]. **preliminaries** [Sta05a]. **preserving** [Gal08]. **primer** [DS05, SD02]. **Principles** [Hou06a, Car01, Gri00, GW08]. **probability** [CKO02]. **problem** [Att09, Wat07]. **Probleme** [BLWW07]. **Problems** [CG05, Kre05, Rit00, SHHS04, AC01, AB01, BDDR00, BLWW07, GH04, KS05a, LeV02, MR01]. **Proceedings** [FDKN04, IL07, BBCM03]. **Process** [Zim04]. **Processing** [Mal09]. **Programmer** [Mak03]. **Programming** [Her01, Att09, Cha08, Cha00, Cha02, Kap04, Kun04, OD05, PF05]. **projects** [DJKP07]. **pseudospectra** [TE05]. **purpose** [PF05]. **Python** [Lan08].

quadrupoles [Mai00].

R [Cha08]. **real** [Gal08]. **Recipes** [PTVF07, EM07]. **recognition** [Eld07]. **Reference** [GDT⁺02, HL01]. **Reliability** [Ein05a, BS01, Ein05b]. **Resources** [Yos02]. **Revised** [Dim03, LVW05, VWY01]. **revolutions** [ABC06]. **Rousse** [LVW05, VWY01]. **Rule** [Ove01].

school [IQF02]. **Schur** [Zha05]. **Science** [Lan08, Urr01a, Str07, Urr01b]. **Scientific** [CHT02, DB08, DB02, Ein05a, GDT⁺02, KK02, Law05, Lys03, MR01, O'L09, PTVF07, QS03, QS06, Yos02, ABC06, Bis04, CR00, CGL03, CL02, DJKP07, Ein05b, EM07, GH04, Hei06, Kap04, KC02, KC09, Kle09, LWA⁺05, LBQ00, Lea04, LW03, RLM06, SHHS04, Tur00, Tur01, Van00a]. **Scientist** [AGM04]. **Scientists** [Rao02, Ant02, Cha05, Dub03, GS08, Hah02]. **SCILAB** [Urr01a, Urr01b]. **Scripting** [Lan08]. **Seamless** [KK02]. **Second** [VWY01]. **Selected** [CG007, Gol07, LVW05]. **Semiseparable** [VvBM08]. **Set** [Atk05]. **Shape** [Gal08]. **Shape-preserving** [Gal08]. **short** [AR06, Han08]. **SIAM** [BLWW07, BLWW04]. **Signal** [Mal09]. **simulation** [All07, Zim04]. **simulations** [SHHS04]. **SIMULINK** [Gra07]. **Simultaneous** [RR00]. **Smalltalk** [Bes01]. **Social** [AGM04]. **Software** [Cha08, LBQ00, Poz02]. **Solution** [CL02, AB01, BDDR00, BLWW07, BT06, Lan00]. **solutions** [SHHS04]. **solved** [DJKP07]. **Solving** [GH04, Sha06, Att09, Mai00]. **Sparse** [Mal09, Dav06, Saa03]. **Special** [GST07, StM05, AC01]. **Spectra** [TE05]. **Spectral** [Tre00]. **spreadsheets** [Kar01]. **squares** [BG09]. **Stability** [Hig02]. **Stanford** [DFM⁺07, DFM⁺07]. **State** [DFM⁺07]. **Statistical** [AGM04, KS05a, Urr01a, Urr01b]. **Statistics** [Gen02, Han08, Mon01]. **stochastic** [CKO02]. **Streifzug** [BLWW07]. **structure** [ABC06].

Structured [Kre05, Bis04]. **Studies** [O'L09]. **study** [BLWW04]. **subspace** [Wat07]. **summer** [IQF02]. **superfast** [Dak06]. **surfaces** [Gal00]. **Symbolic** [ARRY01, LWA⁺05]. **Symmetry** [Bau00]. **system** [Dor00]. **Systems** [vR01, CHT02, Dat04, Dav06, Lan00, Mei05, Saa03, Van00b].

Techniques [CL02, Che05, Gri00, GW08, Kle09, PF05]. **Templates** [BDDR00]. **Theorem** [Ove01]. **Theory** [Ber09, BS08, CG05, Hig08, Hou06b, Ser02, AB01, CR00, Gal00, Lan00, Meu06]. **Thermal** [Mai00]. **third** [LVW05]. **Thumb** [Ove01]. **toolbox** [FH05]. **tools** [Kle09, LBQ00, Sha09]. **Topics** [AC01]. **Tour** [Mal09]. **Transformations** [CM09]. **transforms** [Mai00]. **trends** [CGL03]. **Triangularization** [RR00]. **tutor** [Dak06]. **tutorial** [BHM00, HL01]. **Tutorials** [IQF02]. **twelve** [DJKP07].

Underlying [Car01]. **unified** [Sha06, Sha09]. **University** [DFM⁺07]. **User** [BBD⁺01]. **users** [HLR01, HLR06]. **Using** [Law05, Lys03, Bis04, Dub03, Fau08, GH04, GS08, Kar01, KB00, LWA⁺05, LW03, MF04, PL00, RLM06, SH00, Sta05b, Van00a, YCCM05].

value [AB01]. **vector** [Van00a]. **Verfahren** [Mei05]. **verification** [ARRY01]. **version** [Eat00]. **very** [Han08]. **VI** [BPMB00]. **via** [ES00]. **visualization** [Nak02]. **Vol** [BPMB00]. **Vol.** [HvdV00]. **volume** [LeV02, StM05, Ste01]. **Vom** [BLWW07]. **Vömel** [Mei05].

Wavelet [Mal09]. **Way** [Mal09]. **Works** [CGO07, Gol07].

References

Axelsson:2001:FES

- [AB01] O. Axelsson and V. A. (Vincent Allan) Barker. *Finite element solution of boundary value problems: theory and computation*, volume 35 of *Classics in applied mathematics*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2001. ISBN 0-89871-499-0 (paperback). xxiii + 432 pp. LCCN QA379 .A9 2001. URL <http://www.loc.gov/catdir/enhancements/fy0726/2001032024-d.html>; <http://www.loc.gov/catdir/enhancements/fy0726/2001032024-t.html>.

Andersen:2006:CSS

- [ABC06] Hanne Andersen, Peter Barker, and Xiang Chen. *The cognitive structure of scientific revolutions*. Cambridge University Press, Cambridge, UK, 2006. ISBN 0-521-85575-6. xvii + 199 pp. LCCN Q174.8 .A53 2006. URL <http://www.loc.gov/catdir/enhancements/fy0633/2005021713-d.html>; <http://www.loc.gov/catdir/enhancements/fy0633/2005021713-t.html>

//www.loc.gov/catdir/enhancements/fy0733/2005021713-b.html; http://www.loc.gov/catdir/toc/ecip0516/2005021713.html.

Aberth:2007:IPN

- [Abe07] Oliver Aberth. *Introduction to precise numerical methods*. Academic Press, New York, NY, USA, 2007. ISBN 0-12-373859-8. 272 (est.) pp. LCCN QA76.9.M35 A24 2007. URL http://www.elsevier.com/wps/find/bookdescription.cws_home/710141/description; <http://www.loc.gov/catdir/enhancements/fy0707/2007000712-d.html>; <http://www.loc.gov/catdir/toc/ecip078/2007000712.html>.

Alefeld:2001:TNA

- [AC01] G. Alefeld and X. (Xiaojun) Chen, editors. *Topics in numerical analysis with special emphasis on nonlinear problems*, volume 15 of *Computing. Supplementum*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. ISBN 3-211-83673-X. ISSN 0344-8029. LCCN QA297 .T66 2001.

Altman:2004:NIS

- [AGM04] Micah Altman, Jeff Gill, and Michael McDonald. *Numerical Issues in Statistical Computing for the Social Scientist*. Wiley, New York, NY, USA, 2004. ISBN 0-471-23633-0, 0-471-47574-2 (e-book), 0-471-47576-9 (e-book). xv + 323 pp. LCCN QA276.4 .A398 2004.

Atkinson:2004:ENA

- [AH04] Kendall E. Atkinson and Weimin Han. *Elementary numerical analysis*. Wiley, New York, NY, USA, third edition, 2004. ISBN 0-471-43337-3. xvi + 560 pp. LCCN QA297 .A83 2004. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/toc/wiley032/2003053836.html>.

Allaire:2007:NAO

- [All07] Grégoire Allaire. *Numerical analysis and optimization: an introduction to mathematical modelling and numerical simulation*. Numerical mathematics and scientific computation. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2007. ISBN 0-19-920521-3 (cased), 0-19-920522-1 (paperback). xvi + 455 pp. LCCN QA297 .A52513 2007.

- Ancona:2002:CMA**
- [Anc02] Mario G. Ancona. *Computational methods for applied physics and engineering: an interactive approach*. Rinton Press, Princeton, NJ, 2002. ISBN 1-58949-029-0. xx + 606 pp. LCCN ????.
- Antia:2002:NMS**
- [Ant02] H. M. Antia. *Numerical methods for scientists and engineers*. Birkhäuser Verlag, Basel, Switzerland, second edition, 2002. ISBN 3-7643-6715-6. xxii + 842 pp. LCCN TA335 .A58 2002. URL <http://www.loc.gov/catdir/enhancements/fy0906/2006271968-d.html>.
- Aratyn:2006:SCM**
- [AR06] Henrik Aratyn and Constantin Rasinariu. *A short course in mathematical methods with Maple*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2006. ISBN 981-256-595-7. xv + 700 pp. LCCN QA297 .A73 2006.
- Alefeld:2001:SAM**
- [ARRY01] Götz Alefeld, Jiří Rohn, Siegfried Rump, and Tetsuro Yamamoto, editors. *Symbolic algebraic methods and verification methods*. Springer mathematics. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. ISBN 3-211-83593-8. ix + 266 pp. LCCN QA76.9.M35 S92 2001. US\$69.95. URL <http://www.springer-ny.com/detail.tpl?cart=10209516271260963&isbn=3211835938>.
- Atkinson:2005:ENA**
- [Atk05] Kendall Atkinson. *Elementary Numerical Analysis (3rd Edition) with MATLAB: An Introduction (2nd Edition) Set*. Wiley, New York, NY, USA, 2005. ISBN 0-471-74257-0. ???? pp. LCCN ????.
- Attaway:2009:MPI**
- [Att09] Stormy Attaway. *MATLAB: a practical introduction to programming and problem solving*. Butterworth-Heinemann, Amsterdam, The Netherlands, 2009. ISBN 0-7506-8762-2 (paperback). xx + 452 pp. LCCN QA297 .A87 2009.
- Arfken:2005:MMP**
- [AW05] George B. Arfken and Hans-Jürgen Weber. *Mathematical Methods for Physicists*. Elsevier, Amsterdam, The Netherlands, sixth edition, 2005. ISBN 0-12-059876-0, 0-12-088584-0 (paperback). xii + 1182 pp. LCCN QA37.3 .A74 2005.

Banks:2001:DEG

- [Ban01] Bernard W. Banks. *Differential equations with graphical and numerical methods*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2001. ISBN 0-13-084376-8. xiii + 462 pp. LCCN QA371 .B26 2001.

Baumann:2000:SAD

- [Bau00] Gerd Baumann. *Symmetry analysis of differential equations with Mathematica*. TELOS division of Springer-Verlag, Santa Clara, CA, USA and New York, NY, USA, 2000. ISBN 0-387-98552-2 (hardcover). xii + 521 pp. LCCN QA371 .B36 2000. Includes CD-ROM.

Biran:2002:ME

- [BB02] Adrian Biran and Moshe Breiner. *MATLAB 6 for engineers*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2002. ISBN 0-13-033631-9 (paperback). xx + 777 pp. LCCN QA297 .B522 2002.

Brezzi:2003:NMA

- [BBCM03] Franco Brezzi, Annalisa Buffa, Stefania Corsaro, and Almerico Murli, editors. *Numerical mathematics and advanced applications: proceedings of ENUMATH 2001, the 4th European Conference on Numerical Mathematics and Advanced Applications, Ischia, July 2001*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. ISBN 88-470-0180-3. LCCN QA297 .E89 2001.

Barker:2001:LUG

- [BBD⁺01] V. A. Barker, L. S. Blackford, J. J. Dongarra, J. J. Du Croz, S. J. Hammarling, M. Marinova, J. Waśniewski, and P. Yalamov. *LAPACK95 Users' Guide*. Software, environments, and tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2001. ISBN 0-89871-504-0 (paperback), 0-89871-820-1 (e-book). xviii + 258 pp. LCCN QA76.73.F25 L36 2001. URL <http://www.loc.gov/catdir/enhancements/fy0726/2001042995-d.html>; <http://www.loc.gov/catdir/enhancements/fy0726/2001042995-t.html>.

Bai:2000:TSA

- [BDDR00] Zhaojun Bai, James Demmel, Jack Dongarra, and Axel Ruhe, editors. *Templates for the solution of algebraic eigenvalue problems*. Software, Environments, and Tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2000. ISBN 0-89871-958-5 (electronic bk.), 0-89871-471-0 (paperback). xxx + 410 pp.

LCCN QA193 .T46 2000. URL <http://www.loc.gov/catdir/enhancements/fy0726/00059507-d.html>; <http://www.loc.gov/catdir/enhancements/fy0726/00059507-t.html>. A practical guide.

Bernstein:2009:MMT

- [Ber09] Dennis S. Bernstein. *Matrix Mathematics: Theory, Facts, and Formulas*. Princeton University Press, Princeton, NJ, USA, second edition, 2009. ISBN 0-691-13287-9 (hardcover), 0-691-14039-1 (paperback), 1-4008-3334-5 (e-book). xlvi + 1139 pp. LCCN QA188 .B475 2009; QA188 .B475X 2009 (LC). URL <http://www.jstor.org/stable/10.2307/j.ctt7t833>; <http://www.loc.gov/catdir/toc/ecip0826/2008036257.html>.

Basset:2001:OAI

- [Bes01] Didier H. Basset. *Object-oriented implementation of numerical methods: an introduction with Java and Smalltalk*. Morgan Kaufmann Publishers, Los Altos, CA 94022, USA, 2001. ISBN 1-55860-679-3. xxv + 766 pp. LCCN QA76.76.D47 B475 2001.

Bochev:2009:LSF

- [BG09] Pavel B. Bochev and Max D. Gunzburger, editors. *Least-squares finite element methods*, volume 166 of *Applied Mathematical Sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2009. ISBN 0-387-30888-1. xxii + 660 pp. LCCN QA1 .A647 vol. 166.

Briggs:2000:MT

- [BHM00] William L. Briggs, Van Emden Henson, and S. F. (Stephen Fahrney) McCormick. *A multigrid tutorial*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, second edition, 2000. ISBN 0-89871-462-1 (paperback). xii + 193 pp. LCCN QA377 .B75 2000. URL <http://www.loc.gov/catdir/enhancements/fy0665/00024103-d.html>; <http://www.loc.gov/catdir/enhancements/fy0665/00024103-t.html>.

Bisseling:2004:PSC

- [Bis04] Rob H. Bisseling. *Parallel scientific computation: a structured approach using BSP and MPI*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2004. ISBN 0-19-852939-2. xviii + 305 pp. LCCN QA76.58 .B57 2004. URL <http://www.loc.gov/catdir/enhancements/fy0617/2004046141-d>.

html; <http://www.loc.gov/catdir/enhancements/fy0617/2004046141-t.html>.

Bornemann:2004:SDC

- [BLWW04] Folkmar Bornemann, Dirk Laurie, Stan Wagon, and Jörg Waldvogel. *The SIAM 100-digit challenge: a study in high-accuracy numerical computing*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2004. ISBN 0-89871-561-X (paperback). xi + 306 pp. LCCN QA297 .S4782 2004. URL <http://www.loc.gov/catdir/enhancements/fy0708/2004049139-d.html>; <http://www.loc.gov/catdir/enhancements/fy0708/2004049139-t.html>.

Bornemann:2007:LNP

- [BLWW07] Folkmar Bornemann, Dirk Laurie, Stan Wagon, and Jörg Waldvogel. *Vom Lösen numerischer Probleme: ein Streifzug entlang der “SIAM 10 × 10-Digit Challenge”. (German) [On the solution of numerical problems: a foray along the “SIAM 10 × 10-Digit Challenge”]*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2007. ISBN 3-540-34114-5. xvi + 381 pp. LCCN ????

Baker:2000:NAV

- [BPMB00] Christopher Baker, John Pryce, Giovanni Monegato, and Guido Vanden Berghe, editors. *Numerical analysis 2000. Vol. VI. Ordinary differential equations and integral equations*. Elsevier Science B.V., Amsterdam, The Netherlands, 2000. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). v–xviii and 1–540 pp. J. Comput. Appl. Math. 125 (2000), no. 1–2.

Brandimarte:2002:NMF

- [Bra02] Paolo Brandimarte. *Numerical methods in finance: a MATLAB-based introduction*. Wiley series in probability and statistics. Wiley, New York, NY, USA, 2002. ISBN 0-471-39686-9 (cloth). xv + 403 pp. LCCN HG176.5 .B73 2002. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/bios/wiley042/2001026767.html>; <http://www.loc.gov/catdir/description/wiley035/2001026767.html>; <http://www.loc.gov/catdir/toc/onix06/2001026767.html>.

Brandimarte:2006:NMF

- [Bra06] Paolo Brandimarte. *Numerical methods in finance and economics: a MATLAB-based introduction*. Statistics in prac-

tice. Wiley-Interscience, New York, NY, USA, second edition, 2006. ISBN 0-471-74503-0 (cloth). xxiv + 669 pp. LCCN HG176.5 .B73 2006. URL <http://www.loc.gov/catdir/enhancements/fy0826/2006045787-b.html>; <http://www.loc.gov/catdir/enhancements/fy0826/2006045787-d.html>; <http://www.loc.gov/catdir/enhancements/fy0826/2006045787-t.html>.

Babuska:2001:FEM

- [BS01] Ivo Babuška and Theofanis Strouboulis. *The finite element method and its reliability*. Numerical mathematics and scientific computation. Clarendon Press, New York, NY, USA, 2001. ISBN 0-19-850276-1. xi + 802 pp. LCCN TA347.F5 B33 2001. URL <http://www.loc.gov/catdir/enhancements/fy0612/2001021269-d.html>; <http://www.loc.gov/catdir/toc/fy02/2001021269.html>.

Brenner:2008:MTF

- [BS08] Susanne C. Brenner and L. Ridgway Scott. *The Mathematical Theory of Finite Element Methods*, volume 15 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2008. ISBN 0-387-75933-6. xvii + 397 pp. LCCN QA379 .B74 2008. URL <http://www.loc.gov/catdir/enhancements/fy0824/2007939977-d.html>; <http://www.loc.gov/catdir/enhancements/fy0824/2007939977-t.html>.

Bruaset:2006:NSP

- [BT06] Are Magnus Bruaset and Aslak Tveito, editors. *Numerical solution of partial differential equations on parallel computers*, volume 51 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2006. ISBN 3-540-29076-1. xii + 482 pp.

Bober:2009:NAM

- [BTM09] William Bober, Chi-Tay Tsai, and Oren Masory. *Numerical and analytical methods with MATLAB(R)*. CRC Series in Computational Mechanics and Applied Analysis. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, 2009. ISBN 1-4200-9356-8. viii + 452 pp.

- [Bur05] Richard L. Burden. *Numerical analysis*. Brooks/Cole, Pacific Grove, CA, USA, eighth edition, 2005. ISBN 0-534-39200-8. xiv + 847 pp. LCCN QA297 .B84 2005.
- [Car01] D. J. Cartwright. *Underlying principles of the boundary element method*. WIT, Southampton, 2001. ISBN 1-85312-839-2. ISSN 1460-1419. 276 pp. LCCN TA347.B69 C37 2001.
- [CC06] Steven C. Chapra and Raymond P. Canale. *Numerical methods for engineers*. McGraw-Hill Higher Education, Boston, MA, USA, fifth edition, 2006. ISBN 0-07-291873-X (hard copy). xviii + 926 pp.
- [CG05] Moody T. Chu and Gene H. Golub. *Inverse Eigenvalue Problems: Theory, Algorithms, and Applications*. Numerical Mathematics and Scientific Computation. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2005. ISBN 0-19-856664-6 (hardcover), 0-19-152422-0 (e-book), 0-19-171802-5. xvii + 387 pp. LCCN QA193 .C48 2005.
- [CGL03] Zhangxin Chen, Roland Glowinski, and Kaitai Li, editors. *Current trends in scientific computing*, volume 329 of *Contemporary Mathematics*. American Mathematical Society, Providence, RI, USA, 2003. ISBN 0-8218-3261-1. x + 372 pp. Papers from the ICM 2002 Beijing Satellite Conference on Scientific Computing held at Xi'an Jiaotong University, Xi'an, August 15–18, 2002.
- [CGO07] Raymond H. Chan, Chen Greif, and Dianne P. O'Leary, editors. *Milestones in Matrix Computation: the Selected Works of Gene H. Golub with Commentaries*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2007. ISBN 0-19-920681-3. xi + 565 + 3 pp. LCCN QA188 .G67 2007. URL <http://www.loc.gov/catdir/enhancements/fy0737/2007276086-d.html>.

- Chapman:2000:MPE**
- [Cha00] Stephen J. Chapman. *MATLAB programming for engineers*. Brooks/Cole, Pacific Grove, CA, USA, 2000. ISBN 0-534-95151-1. xvii + 444 pp. LCCN QA297.C418 2000.
- Chapman:2002:MPE**
- [Cha02] Stephen J. Chapman. *MATLAB programming for engineers*. BookWare companion series. Brooks/Cole, Pacific Grove, CA, USA, second edition, 2002. ISBN 0-534-39056-0. xviii + 478 pp. LCCN QA297 .C418 2002.
- Chapra:2005:ANM**
- [Cha05] Steven C. Chapra. *Applied numerical methods with MATLAB for engineers and scientists*. McGraw-Hill Higher Education, Boston, MA, USA, 2005. ISBN 0-07-239265-7 , 0-07-297677-2 (set). xvi + 384 pp. LCCN QA297 .C4185 2005.
- Chambers:2008:SDA**
- [Cha08] John M. Chambers. *Software for data analysis: programming with R*. Statistics and computing. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2008. ISBN 0-387-75935-2 (paperback), 0-387-75936-0 (e-book). xiv + 498 pp. LCCN QA276.45.R3 C43 2008.
- Chen:2005:MPT**
- [Che05] Ke Chen. *Matrix preconditioning techniques and applications*, volume 19 of *Cambridge monographs on applied and computational mathematics*. Cambridge University Press, Cambridge, UK, 2005. ISBN 0-521-83828-2. xxiii + 568 + 8 pp. LCCN QA188 .C455 2005. URL <http://www.loc.gov/catdir/enhancements/fy0632/2006271080-d.html>; <http://www.loc.gov/catdir/enhancements/fy0632/2006271080-t.html>; <http://www.loc.gov/catdir/enhancements/fy0733/2006271080-b.html>.
- Cornea:2002:SCI**
- [CHT02] Marius Cornea, John Harrison, and Ping Tak Peter Tang. *Scientific computing on Itanium-based systems*. Intel Corporation, Santa Clara, CA, USA, 2002. ISBN 0-9712887-7-1. xvii + 406 pp. LCCN QA76.8.I83 C67 2002. US\$69.95. URL http://www.intel.com/intelpress/sum_scientific.htm.

Cyganowski:2002:EPS

- [CKO02] Sasha Cyganowski, Peter E. Kloeden, and Jerzy Ombach. *From elementary probability to stochastic differential equations with Maple*. Universitext. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 3-540-42666-3 (paperback). ISSN 0172-5939 (print), 2191-6675 (electronic). xvi + 310 pp. LCCN QA273 .C94 2002. URL <http://www.loc.gov/catdir/enhancements/fy0817/2001054970-d.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2001054970-t.html>.

Ciarlet:2002:HNA

- [CL02] Philippe G. Ciarlet and Jacques Louis Lions. *Handbook of Numerical Analysis: Solution of Equations in R^n (part 4): Techniques of scientific computing (part 4), Numerical methods for fluids (part 2)*, volume VIII. North-Holland, Amsterdam, The Netherlands, 2002. ISBN 0-444-50906-2. xii + 661 pp. LCCN QA297 .H287 1990; QA297 .H34 1990; QA297 .H287 1989.

Campbell:2009:GIL

- [CM09] S. L. (Stephen La Vern) Campbell and C. D. (Carl Dean) Meyer, Jr. *Generalized Inverses of Linear Transformations*, volume 56 of *Classics in applied mathematics*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2009. ISBN 0-89871-671-3, 0-89871-904-6 (e-book). xx + 272 pp. LCCN QA188 .C36 2009. URL http://pubs.siam.org/ebooks/siam/classics_in_applied_mathematics/c156; <http://www.loc.gov/catdir/enhancements/fy0916/2008046428-b.html>; <http://www.loc.gov/catdir/enhancements/fy0916/2008046428-d.html>; <http://www.loc.gov/catdir/enhancements/fy0916/2008046428-t.html>.

Calvetti:2000:MJT

- [CR00] Daniela Calvetti and Lothar Reichel, editors. *Mathematical journey through analysis, matrix theory and scientific computation*, volume 25(1–4) of *Numerical Algorithms*. J. C. Baltzer AG, Scientific Publishing Company, Basel, Switzerland, 2000. CODEN NUALEG. ISBN ???? ISSN 1017-1398 (print), 1572-9265 (electronic). LCCN ???? Papers from the conference held in honor of Richard S. Varga on the occasion of his 70th birthday at Kent State University, Kent, OH, March 25–27, 1999.

Daku:2006:MTC

- [Dak06] Brian Daku. *MATLAB tutor CD: learning MATLAB superfast!* Wiley, New York, NY, USA, 2006. ISBN 0-471-72879-9 (CD-ROM), 0-471-27469-0 (paperback). xxi + 162 pp. LCCN ????.

Datta:2004:NML

- [Dat04] Biswa Nath Datta. *Numerical methods for linear control systems: design and analysis*. Elsevier Academic Press, Amsterdam, The Netherlands, 2004. ISBN 0-12-203590-9. xxxviii + 695 pp. LCCN QA402.3 .D368 2004. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/description/els041/2003058331.html>; <http://www.loc.gov/catdir/toc/els041/2003058331.html>.

Davis:2006:DMS

- [Dav06] Timothy A. Davis. *Direct methods for sparse linear systems*. Fundamentals of algorithms. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2006. ISBN 0-89871-613-6 (paperback). xii + 217 pp. LCCN QA188 .D386 2006. URL <http://www.loc.gov/catdir/enhancements/fy0710/2006044387-d.html>; <http://www.loc.gov/catdir/enhancements/fy0710/2006044387-t.html>; <http://www.loc.gov/catdir/enhancements/fy0733/2006044387-b.html>.

Deuflhard:2002:SCO

- [DB02] P. (Peter) Deuflhard and Folkmar Bornemann. *Scientific computing with ordinary differential equations*, volume 42 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 0-387-95462-7 (hardcover). xix + 485 pp. LCCN QA371.5.D37 D4813 2002. URL <http://www.loc.gov/catdir/enhancements/fy0817/2002024174-d.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2002024174-t.html>. Translated by Werner C. Rheinboldt.

Dahlquist:2003:NM

- [DB03] Germund Dahlquist and Åke Björck. *Numerical methods*. Dover, New York, NY, USA, 2003. ISBN 0-486-42807-9 (paperback). xviii + 573 pp. LCCN QA297 .D33 2003. URL <http://www.loc.gov/catdir/description/doover031/2002072867.html>; <http://www.loc.gov/catdir/toc/doover031/2002072867.html>.

- Dahlquist:2008:NMS**
- [DB08] Germund Dahlquist and Åke Björck. *Numerical Methods in Scientific Computing*, volume 1. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2008. ISBN 0-89871-644-6. xxviii + 717 pp. LCCN QA297 .D335 2008. US\$109.00. URL <http://www.ec-securehost.com/SIAM/OT103.html>; <http://www.loc.gov/catdir/enhancements/fy0834/2007061806-b.html>; <http://www.loc.gov/catdir/enhancements/fy0834/2007061806-d.html>; <http://www.loc.gov/catdir/enhancements/fy0834/2007061806-t.html>.
- Du:2007:SSA**
- [DFM⁺07] Ding-Zhu Du, Charles Farbat, Walter Murray, Michael Overton, Haesun Park, Michael Saunders, and James Varah, editors. *STANFORD 50: State of the Art & Future Directions of Computational Mathematics & Numerical Computing: A conference celebrating the 50th anniversary George Forsythe's arrival at Stanford and Gene Golub's 75th birthday, Stanford University, March 29–31, 2007.* ????, ????, 2007. ISBN ????. LCCN ????.
- Dimov:2003:NMA**
- [Dim03] Ivan Dimov, editor. *Numerical methods and applications: 5th International Conference, NMA 2002, Borovets, Bulgaria, August 20–24, 2002: Revised Papers*, volume 2542 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. CODEN LNCS9. ISBN 3-540-00608-7 (softcover). ISSN 0302-9743. LCCN QA297 .I483 2002. URL <http://link.springer-ny.com/link/service/series/0558/tocs/t2542.htm>; <http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=2542>. Also available via the World Wide Web.
- Danaila:2007:ISC**
- [DJKP07] Ionut Danaila, Pascal Joly, Sidi Mahmoud Kaber, and Marie Postel, editors. *An introduction to scientific computing: twelve computational projects solved with MATLAB*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2007. ISBN 0-387-30889-X (hardcover). xv + 294 pp. LCCN QA297 .I585 2007. URL <http://www.loc.gov/catdir/enhancements/fy0824/2006931780-d.html>; <http://www.loc.gov/catdir/toc/fy0712/2006931780.html>.

Desai:2001:IFE

- [DK01] C. S. (Chandrakant S.) Desai and T. (Tribikram). Kundu. *Introductory finite element method*. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, 2001. ISBN 0-8493-0243-9. 496 pp. LCCN TA347.F5 .D48 2001. URL <http://www.loc.gov/catdir/enhancements/fy0646/2001017466-d.html>.

Dorato:2000:AFS

- [Dor00] Peter Dorato. *Analytic feedback system design: an interpolation approach*. Brooks/Cole, Pacific Grove, CA, USA, 2000. ISBN 0-534-36917-0 (paperback). ix + 109 pp. LCCN TJ216 .D65 2000.

Davis:2005:MP

- [DS05] Timothy A. Davis and Kermit Sigmon. *MATLAB primer*. Chapman and Hall/CRC, Boca Raton, FL, USA, seventh edition, 2005. ISBN 1-58488-523-8. xii + 215 pp. LCCN QA297 .D38 2005.

Dubin:2003:NAM

- [Dub03] Daniel Dubin. *Numerical and analytical methods for scientists and engineers using Mathematica*. Wiley-Interscience, New York, NY, USA, 2003. ISBN 0-471-26610-8 (cloth). xvi + 633 pp. LCCN QC20.6 .D83 2003. Includes CD-ROM.

Eaton:2000:GOH

- [Eat00] John W. (John Wesley) Eaton. *GNU Octave: a high-level interactive language for numerical computations: edition 3 for Octave version 2.0.13*. Network Theory Ltd., Bristol, UK, 2000. ISBN 0-9541617-2-6 (paperback). viii + 311 pp. LCCN ????.

Eaton:2002:GOH

- [Eat02] John W.. Eaton. *GNU Octave: a high-level interactive language for numerical computations*. Network Theory Ltd., Bristol, UK, third edition, 2002. ISBN 0-9541617-2-6. viii + 311 pp. LCCN ???? For Octave version 2.0.13, February 1997.

Eaton:2005:GOH

- [Eat05] John W. Eaton. *GNU Octave: a high-level interactive language for numerical computations*. Network Theory Ltd., Bristol, UK, 2005. ISBN 0-9541617-2-6. viii + 311 pp. LCCN ???? URL <http://www.gbv.de/dms/ilmenau/toc/520168526eaton.PDF>. For Octave version 2.0.17 (stable).

Eaton:2008:GOM

- [EBH08] John W. Eaton, David Bateman, and Søren Hauberg. *GNU Octave manual: a high-level interactive language for numerical computations*. Network Theory Ltd., Bristol, UK, 2008. ISBN 0-9546120-6-X. x + 555 pp. LCCN ???? US\$39.95. Version 3 for Octave version 3.0.2, August 2008.

Einarson:2005:ARS

- [Ein05a] Bo Einarson, editor. *Accuracy and Reliability in Scientific Computing*. Software, environments, tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2005. ISBN 0-89871-584-9. xxiii + 336 pp. LCCN Q183.9 .A28 2005. URL <http://ec-securehost.com/SIAM/SE18.html>.

Einarsson:2005:ARS

- [Ein05b] Bo Einarsson. *Accuracy and reliability in scientific computing*. Software, environments, tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2005. ISBN 0-89871-584-9 (paperback). xxiii + 338 pp. LCCN Q183.9 .A28 2005. URL <http://www.loc.gov/catdir/enhancements/fy0665/2005047019-d.html>; <http://www.loc.gov/catdir/enhancements/fy0665/2005047019-t.html>.

Etter:2002:IM

- [EKH02] D. M. Etter, David C. Kuncicky, and Douglas W. Hull. *Introduction to Matlab 6*. ESource—the Prentice Hall engineering source. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2002. ISBN 0-13-032845-6. xviii + 142 pp. LCCN TA345 .E8725 2002.

Etter:2005:IM

- [EKM05] D. M. Etter, David C. Kuncicky, and Holly Moore. *Introduction to MATLAB 7*. Pearson Prentice Hall, Upper Saddle River, NJ 07458, USA, 2005. ISBN 0-13-147492-8. xix + 283 pp. LCCN TA345 .E8726 2005 UCB.

Elden:2007:MMD

- [Eld07] Lars Eldén. *Matrix methods in data mining and pattern recognition*. Fundamentals of algorithms. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2007. ISBN 0-89871-626-8 (paperback). x + 224 pp. LCCN QA76.9.D343 E52 2007. URL <http://www.loc.gov/catdir/enhancements/fy0715/2006041348-b.html>; <http://www.loc.gov/catdir/enhancements/fy0715/2006041348-d.html>.

html; <http://www.loc.gov/catdir/enhancements/fy0715/2006041348-t.html>.

Enns:2007:CAR

- [EM07] Richard H. Enns and George McGuire. *Computer algebra recipes: an advanced guide to scientific modeling*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2007. ISBN 0-387-25768-3 (softcover), 0-387-49333-6 (ebook). x + 372 pp. LCCN QA371 .E56 2007. URL <http://www.loc.gov/catdir/enhancements/fy0824/2006936017-d.html>; <http://www.loc.gov/catdir/toc/fy0710/2006936017.html>.

Etter:2004:IM

- [EMK04] Delores M. Etter, Holly Moore, and David C. Kuncicky. *Introduction to MATLAB 7*. ESource—the Prentice Hall engineering source. Pearson Prentice Hall, Upper Saddle River, NJ 07458, USA, 2004. ISBN 0-13-147492-8. xix + 283 pp. LCCN ????

Epperson:2002:INM

- [Epp02] James F. Epperson. *An introduction to numerical methods and analysis*. Wiley, New York, NY, USA, 2002. ISBN 0-471-31647-4. xv + 556 pp. LCCN QA297 .E568 2002. URL <http://www.loc.gov/catdir/description/wiley036/2001033012.html>; <http://www.loc.gov/catdir/enhancements/fy0730/2001033012-b.html>; <http://www.loc.gov/catdir/toc/onix07/2001033012.html>.

Evans:2000:AIM

- [ES00] Michael (Michael John) Evans and T. Swartz. *Approximating integrals via Monte Carlo and deterministic methods*, volume 20 of *Oxford statistical science series*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2000. ISBN 0-19-850278-8. ix + 288 pp. LCCN QA311 .E92 2000. URL <http://www.loc.gov/catdir/enhancements/fy0604/99052843-d.html>; <http://www.loc.gov/catdir/enhancements/fy0604/99052843-t.html>.

Fausett:2008:ANA

- [Fau08] Laurene V. Fausett. *Applied Numerical Analysis using MATLAB*. Pearson Prentice Hall, Upper Saddle River, NJ, USA, second edition, 2008. ISBN 0-13-239728-5. xiii + 673 pp. LCCN QA297 .F38 2008.

Faires:2003:NM

- [FB03] J. Douglas Faires and Richard L. Burden. *Numerical methods*. Brooks/Cole–Thomson Learning, Pacific Grove, CA, USA, third edition, 2003. ISBN 0-534-40761-7. xii + 622 pp. LCCN QA297 .F35 2003.

Feistauer:2004:NMA

- [FDKN04] M. (Miloslav) Feistauer, Vít Dolejší, Petr Knobloch, and Karel Najzar, editors. *Numerical Mathematics and Advanced Applications: Proceedings of ENUMATH 2003 the 5th European Conference on Numerical Mathematics and Advanced Applications Prague, August 2003*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2004. ISBN 3-642-62288-7, 3-540-21460-7, 3-642-18775-7 (e-book). LCCN QA297 .E89 2003. URL <http://link.springer.com/10.1007/978-3-642-18775-9>.

Farin:2005:PLA

- [FH05] Gerald E. Farin and Dianne Hansford. *Practical linear algebra: a geometry toolbox*. A. K. Peters, Ltd., Wellesley, MA, USA, 2005. ISBN 1-56881-234-5. xvi + 384 pp. LCCN QA184.2 F37 2005.

Flowers:2000:INM

- [Flo00] B. H. (Brian Hilton) Flowers. *An Introduction to Numerical Methods in C++*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, revised edition, 2000. ISBN 0-19-850693-7. xxii + 555 pp. LCCN QA297 .F54 2000. URL <http://www.loc.gov/catdir/enhancements/fy0610/00037343-d.html>; <http://www.loc.gov/catdir/enhancements/fy0610/00037343-t.html>.

Gallier:2000:CSG

- [Gal00] Jean H. Gallier. *Curves and surfaces in geometric modeling: theory and algorithms*. The Morgan Kaufmann series in computer graphics and geometric modeling. Morgan Kaufmann Publishers, Los Altos, CA 94022, USA, 2000. ISBN 1-55860-599-1. xv + 491 pp. LCCN QA567 .G28 2000. URL <http://www.loc.gov/catdir/description/els033/99036401.html>; <http://www.loc.gov/catdir/toc/els033/99036401.html>.

Gal:2008:SPA

- [Gal08] Sorin G. Gal. *Shape-preserving approximation by real and complex polynomials*. Birkhäuser Boston Inc., Cambridge, MA, USA, 2008. ISBN 0-8176-4702-3, 0-8176-4703-1. xiii + 352

pp. LCCN QA221 .G34 2008. URL <http://www.springer.com/birkhauser/mathematics/book/978-0-8176-4702-5>.

Garcia:2000:NMP

- [Gar00] Alejandro L. Garcia. *Numerical methods for physics*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, second edition, 2000. ISBN 0-13-906744-2. vii + 423 pp. LCCN QC20 .G37 2000.

Galassi:2002:GSL

- [GDT⁺02] Mark Galassi, Jim Davies, James Theiler, Brian Gough, Gerard Jungman, Michael Booth, and Fabrice Rossi. *GNU Scientific Library: Reference Manual*. Network Theory Ltd., Bristol, UK, second edition, 2002. ISBN 0-9541617-3-4. xvi + 601 pp. LCCN QA76.73.C15.

Gentle:2002:ECS

- [Gen02] James E. Gentle. *Elements of Computational Statistics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 0-387-98542-5. xiii + 221 pp. LCCN QA184 .G45 1998.

Goedecker:2001:PON

- [GH01] S. (Stefan) Goedecker and Adolfy Hoisie. *Performance optimization of numerically intensive codes*. Software, environments, tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2001. ISBN 0-89871-484-2 (paperback). xi + 173 pp. LCCN QA76.9.A73 G635 2001. URL <http://www.loc.gov/catdir/enhancements/fy0739/00067939-d.html>; <http://www.loc.gov/catdir/enhancements/fy0739/00067939-t.html>.

Gander:2004:SPS

- [GH04] Walter Gander and Jiří Hřebíček. *Solving problems in scientific computing using Maple and MATLAB*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., fourth edition, 2004. ISBN 3-540-21127-6. xxii + 476 pp. LCCN Q183.9 .G36 2004 UCD.

Gilat:2004:MIA

- [Gil04] Amos Gilat. *MATLAB: an introduction with applications*. Wiley, New York, NY, USA, 2004. ISBN 0-471-43997-5 (paperback). viii + 296 pp. LCCN QA297 .G48 2004 UCR.

Gilat:2005:MIA

- [Gil05] Amos Gilat. *MATLAB: an introduction with applications*. Wiley, New York, NY, USA, second edition, 2005. ISBN 0-471-69420-7. viii + 343 pp. LCCN QA297 .G48 2005.

Golub:2002:IMM

- [GK02] Gene H. Golub and Lev A. Krukier. *Iterative Methods and Matrix Computations*. Rostov State University, Rostov-on-Don, Russia, 2002. ISBN ???? ???? pp. LCCN ???? Lectures of Instructor and Abstracts of Young Scientists (2–9 June, 2002).

Guenther:2005:INM

- [GK05] Ronald B. Guenther and Abdelwahab Kharab. *An Introduction to Numerical Methods: a MATLAB Approach*. Chapman and Hall/CRC, Boca Raton, FL, USA, 2005. ISBN 1-58488-557-2. 608 pp. LCCN QA297 .K52 2006.

Gockenbach:2002:PDE

- [Goc02] Mark S. Gockenbach. *Partial differential equations: analytical and numerical methods*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2002. ISBN 0-89871-518-0. xxii + 614 pp. LCCN QA377 .G63 2002.

Golub:2007:MMC

- [Gol07] Gene H. Golub. *Milestones in matrix computation: selected works of Gene H. Golub, with commentaries*. Oxford Science Publications. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2007. ISBN 0-19-920681-3. xii + 565 + 3 pp. LCCN QA188 .G67 2007. URL <http://www.loc.gov/catdir/enhancements/fy0737/2007276086-d.html>. Edited by Raymond H. Chan, Chen Greif and Dianne P. O’Leary.

Govaerts:2000:NMB

- [Gov00] Willy J. F. Govaerts. *Numerical Methods for Bifurcations of Dynamical Equilibria*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2000. ISBN 0-89871-442-7. xxii + 362 pp.

Gran:2007:NCS

- [Gra07] Richard J. Gran. *Numerical computing with SIMULINK*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA,

2007. ISBN 0-89871-637-3 (paperback), 0-89871-781-7 (e-book).
 xxi + 306 pp. LCCN QA297 .G676 2007.

Griewank:2000:EDP

- [Gri00] Andreas Griewank. *Evaluating derivatives: principles and techniques of algorithmic differentiation*, volume 19 of *Frontiers in applied mathematics*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2000. ISBN 0-89871-451-6 (paperback). xxiv + 369 pp. LCCN QA304 .G76 2000. URL <http://www.loc.gov/catdir/enhancements/fy0621/99052587-d.html>; <http://www.loc.gov/catdir/enhancements/fy0621/99052587-t.html>.

Gilat:2008:NME

- [GS08] Amos Gilat and Vish Subramaniam. *Numerical methods for engineers and scientists: an introduction with applications using MATLAB*. Wiley, New York, NY, USA, second edition, 2008. ISBN 0-471-73440-3. xx + 459 pp. LCCN QA297 .G49 2008. URL <http://www.loc.gov/catdir/enhancements/fy0835/2008299899-b.html>; <http://www.loc.gov/catdir/enhancements/fy0835/2008299899-d.html>; <http://www.loc.gov/catdir/enhancements/fy0835/2008299899-t.html>.

Gil:2007:NMS

- [GST07] Amparo Gil, Javier Segura, and Nico M. Temme. *Numerical Methods for Special Functions*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2007. ISBN 0-89871-634-9. xvi + 415 pp. LCCN QA351 .G455 2007. US\$99.00.

Golub:2007:MC

- [GV07] Gene H. Golub and Charles F. Van Loan. *Matrix computations*. Johns Hopkins Studies in the Mathematical Sciences. Hindustan Book Agency, New Delhi, India, third edition, 2007. ISBN ???? 722 (est.) pp.

Gerald:2004:ANA

- [GW04] Curtis F. Gerald and Patrick O. Wheatley. *Applied numerical analysis*. Pearson/Addison-Wesley, Boston, MA, USA, seventh edition, 2004. ISBN 0-321-13304-8. x + 609 pp. LCCN QA297 .G47 2004.

Griewank:2008:EDP

- [GW08] Andreas Griewank and Andrea Walther. *Evaluating derivatives: principles and techniques of algorithmic differentiation*. Soci-

ety for Industrial and Applied Mathematics, Philadelphia, PA, USA, second edition, 2008. ISBN 0-89871-659-4. xxi + 438 pp. LCCN QA304 .G76 2008. URL <http://www.loc.gov/catdir/toc/ecip0818/2008021064.html>.

Hahn:2002:EMS

- [Hah02] Brian D. Hahn. *Essential MATLAB for scientists and engineers*. Butterworth-Heinemann, Oxford, UK, second edition, 2002. ISBN 0-7506-5240-3. xvi + 298 pp. LCCN TA345 .H314 2002.

Hand:2008:SVS

- [Han08] David J. Hand. *Statistics: a very short introduction*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2008. ISBN 0-19-923356-X. 124 pp. LCCN ????

Harrison:2001:CMP

- [Har01] P. (Paul) Harrison. *Computational methods in physics, chemistry, and biology: an introduction*. Wiley, New York, NY, USA, 2001. ISBN 0-471-49562-X (hardcover), 0-471-49563-8 (limp). xix + 201 pp. LCCN QC20.7.A5 H39 2001. URL <http://www.loc.gov/catdir/description/wiley035/2001045412.html>; <http://www.loc.gov/catdir/toc/wiley021/2001045412.html>.

Heinbockel:2006:NMS

- [Hei06] John Henry Heinbockel. *Numerical methods for scientific computing*. Trafford, Victoria, BC, Canada, 2006. ISBN 1-4120-3153-2 (paperback). 501 pp. LCCN Q183.9 2006.

Herniter:2001:PM

- [Her01] Marc E. Herniter. *Programming in MATLAB*. Brooks/Cole-Thomson Learning, Pacific Grove, CA, USA, 2001. ISBN 0-534-36880-8 (paperback). xx + 486 pp. LCCN QA297 .H43 2001.

Higham:2000:MG

- [HH00] Desmond J. Higham and Nicholas J. Higham. *MATLAB Guide*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2000. ISBN 0-89871-469-9. xxii + 283 pp. LCCN QA297 .H5217 2000.

Higham:2005:MG

- [HH05] D. J. (Desmond J.) Higham and Nicholas J. Higham. *MATLAB guide*. Society for Industrial and Applied Mathematics, Philadel-

phia, PA, USA, second edition, 2005. ISBN 0-89871-578-4. xxiii + 382 pp. LCCN QA297 .H5217 2005.

Higham:2002:ASN

- [Hig02] Nicholas J. Higham. *Accuracy and Stability of Numerical Algorithms*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, second edition, 2002. ISBN 0-89871-521-0. xxx + 680 pp. LCCN QA297 .H53 2002.

Higham:2008:FMT

- [Hig08] Nicholas J. Higham. *Functions of Matrices: Theory and Computation*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2008. ISBN 0-89871-646-2. xx + 425 pp. Theory and computation.

Hanselman:2001:MMC

- [HL01] Duane C. Hanselman and Bruce Littlefield. *Mastering MATLAB 6: a comprehensive tutorial and reference*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2001. ISBN 0-13-019468-9. xviii + 814 pp. LCCN QA297 .H293 2001.

Hanselman:2005:MM

- [HL05] Duane C. Hanselman and Bruce Littlefield. *Mastering MATLAB 7*. Pearson Prentice Hall, Upper Saddle River, NJ 07458, USA, 2005. ISBN 0-13-143018-1 (paperback), 0-13-185714-2. xi + 852 pp. LCCN QA297 .H2963 2005.

Hunt:2001:GMB

- [HLR01] Brian R. Hunt, Ronald L. Lipsman, and Jonathan M. (Jonathan Micah) Rosenberg. *A guide to MATLAB: for beginners and experienced users*. Cambridge University Press, Cambridge, UK, 2001. ISBN 0-521-80380-2 (hardcover), 0-521-00859-X (paperback). xvii + 327 pp. LCCN QA297 .H86 2001. URL <http://www.cambridge.org/uk/catalogue/email.asp?isbn=052100859X>; <http://www.loc.gov/catdir/description/cam021/00068880.html>; <http://www.loc.gov/catdir/toc/cam022/00068880.html>. With Kevin R. Coombes, John E. Osborn, and Garrett J. Stuck.

Hunt:2006:GMB

- [HLR06] Brian R. Hunt, Ronald J. Lipsman, and J. (Jonathan) Rosenberg. *A guide to MATLAB: for beginners and experienced users*. Cambridge University Press, Cambridge, UK, second edition, 2006.

ISBN 0-521-85068-1, 0-521-61565-8 (paperback). xv + 311 pp.
 LCCN QA297 .H86 2006 UCD.

Hogben:2007:HLA

- [Hog07] Leslie Hogben, editor. *Handbook of Linear Algebra*. Discrete Mathematics and its Applications (Boca Raton). Chapman and Hall/CRC, Boca Raton, FL, USA, 2007. ISBN 1-58488-510-6 (hardcover), 1-4200-1057-3 (e-book). xxx + 1370 pp. LCCN QA184.2 .H36 2007. URL <http://www.crcnetbase.com/isbn/9781420010572>; <http://www.crcnetbase.com/isbn/9781584885108>; <http://www.loc.gov/catdir/enhancements/fy0647/2006045491-d.html>. Associate editors: Richard Brualdi, Anne Greenbaum and Roy Mathias.

Householder:2006:PNA

- [Hou06a] Alston S. Householder. *Principles of Numerical Analysis*. Dover, New York, NY, USA, corrected edition, 2006. ISBN 0-486-45312-X. x + 274 pp.

Householder:2006:TMN

- [Hou06b] Alston Scott Householder. *The Theory of Matrices in Numerical Analysis*. Dover, New York, NY, USA, 2006. ISBN 0-486-44972-6 (paperback). xi + 257 pp. LCCN QA188 .H67 2006. URL <http://www.loc.gov/catdir/enhancements/fy0634/2005054775-d.html>.

Hadjidimos:2000:NAV

- [HvdV00] Apostolos Hadjidimos and Henk van der Vorst, editors. *Numerical analysis 2000. Vol. III. Linear algebra*. Elsevier Science Publishers, Amsterdam, The Netherlands, 2000. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). i–xii and 1–531 pp. J. Comput. Appl. Math. **123** (2000), no. 1–2.

Iske:2007:AAP

- [IL07] Armin Iske and Jeremy Levesley, editors. *Algorithms for Approximation: Proceedings of the 5th International Conference, Chester, July 2005*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2007. ISBN 3-540-46551-0, 3-540-33283-9. LCCN QA221 .A44 2007.

Ipsen:2009:NMA

- [Ips09] Ilse C. F. Ipsen. *Numerical matrix analysis*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2009. ISBN

0-89871-676-4. xiv + 128 pp. LCCN QA275 .I67 2009. URL <http://www.loc.gov/catdir/enhancements/fy0912/2009008514-b.htm>; <http://www.loc.gov/catdir/enhancements/fy0912/2009008514-d.htm>; <http://www.loc.gov/catdir/enhancements/fy0912/2009008514-t.htm>.

Iske:2002:TMIG

- [IQF02] Armin Iske, Ewald Quak, and Michael S. Floater, editors. *Tutorials on multiresolution in geometric modelling: summer school lectures notes*, Mathematics and visualization. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 3-540-43639-1. LCCN T385 .T88 2002. URL <http://www.loc.gov/catdir/enhancements/fy0817/2002070537-d.htm>; <http://www.loc.gov/catdir/enhancements/fy0817/2002070537-t.htm>.

Iserles:2004:AN

- [Ise04] A. Iserles, editor. *Acta numerica*. Cambridge University Press, Cambridge, UK, 2004. ISBN 0-521-83811-8. ISSN 0962-4929 (print), 1474-0508 (electronic). 431 pp. LCCN ????

Iserles:2009:FCN

- [Ise09] Arieh Iserles. *A first course in the numerical analysis of differential equations*, volume 44 of *Cambridge texts in applied mathematics*. Cambridge University Press, Cambridge, UK, second edition, 2009. ISBN 0-521-73490-8 (paperback). viii + 459 pp. LCCN QA371 .I813 2009. US\$29.99.

Knabner:2003:NME

- [KA03] Peter Knabner and Lutz Angermann. *Numerical methods for elliptic and parabolic partial differential equations*, volume 44 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. ISBN 0-387-95449-X (hardcover). xv + 424 pp. LCCN QA377 .K575 2003. URL <http://www.loc.gov/catdir/enhancements/fy0817/2002044522-d.htm>; <http://www.loc.gov/catdir/enhancements/fy0817/2002044522-t.htm>.

Kammler:2000:FCF

- [Kam00] David W. Kammler. *A First Course in Fourier Analysis*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2000. ISBN 0-13-578782-3. xv + 790 pp. LCCN QA403.5 .K36 2000.

Kaplan:2004:ISC

- [Kap04] Daniel Kaplan. *An introduction to scientific computation and programming*. Brooks/Cole–Thomson Learning, Belmont, CA, 2004. ISBN 0-534-38913-9. xiii + 546 pp. LCCN QA76.6 .K37 2004.

Karris:2001:NAU

- [Kar01] Steven T. Karris. *Numerical analysis using MATLAB and spreadsheets*. Orchard Publications, Fremont, CA, USA, 2001. ISBN 0-9709511-1-6. various pp. LCCN QA297 .K37 2001.

Kwon:2000:FEM

- [KB00] Young W. Kwon and Hyochoong Bang. *The finite element method using MATLAB*. CRC mechanical engineering series. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, second edition, 2000. ISBN 0-8493-0096-7. 607 pp. LCCN TA347.F5 K86 2000. URL <http://www.loc.gov/catdir/enhancements/fy0646/00044425-d.html>.

Kincaid:2002:NAM

- [KC02] David (David Ronald) Kincaid and E. W. (Elliott Ward) Cheney. *Numerical analysis: mathematics of scientific computing*. Brooks/Cole, Pacific Grove, CA, USA, third edition, 2002. ISBN 0-534-38905-8. xiv + 788 pp. LCCN QA297 .K563 2002.

Kincaid:2009:NAM

- [KC09] David (David Ronald) Kincaid and E. W. (Elliott Ward) Cheney. *Numerical analysis: mathematics of scientific computing*, volume 2 of *The Sally series; Pure and applied undergraduate texts*. American Mathematical Society, Providence, RI, USA, third edition, 2009. ISBN 0-8218-4788-0. xiv + 788 pp. LCCN QA297 .K563 2009. URL <http://www.loc.gov/catdir/toc/fy0906/2008047389.html>.

Kharab:2001:INM

- [KG01] Abdelwahab Kharab and Ronald B. Guenther. *An Introduction to Numerical Methods: a MATLAB Approach*. Chapman and Hall/CRC, Boca Raton, FL, USA, 2001. ISBN 1-58488-281-6. 440 (est.) pp. LCCN QA297 .K52 2001. US\$69.95, UK£29.99.

Kharab:2006:INM

- [KG06] Abdelwahab Kharab and Ronald B. Guenther. *An introduction to numerical methods: a MATLAB approach*. Chapman and

Hall/CRC, Boca Raton, FL, USA, second edition, 2006. ISBN 1-58488-557-2. 608 pp. LCCN QA297 .K52 2006. Includes CD-ROM.

King:2007:DNC

- [Kin07] Louis Vessot King. *On the Direct Numerical Calculation of Elliptic Functions and Integrals*. Mellon Press, 2007. ISBN 1-4067-4226-0. 56 pp.

Kiusalaas:2005:NME

- [Kiu05] Jaan Kiusalaas. *Numerical Methods in Engineering with Matlab*. Cambridge University Press, Cambridge, UK, 2005. ISBN 0-521-85288-9 (hardback). viii + 426 pp. LCCN TA345 .K58 2005.

Karniadakis:2002:PSC

- [KK02] George Em Karniadakis and Robert M. Kirby. *Parallel Scientific Computing in C++ and MPI: a Seamless Approach to Parallel Algorithms*. Cambridge University Press, Cambridge, UK, 2002. ISBN 0-521-52080-0 (paperback), 0-521-81754-4 (hardcover). xi + 616 pp. LCCN QA76.58 .K37 2003. US\$50.00 (paperback), US\$130.00 (hardcover). URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/description/cam031/2002034805.html>; <http://www.loc.gov/catdir/samples/cam033/2002034805.html>; <http://www.loc.gov/catdir/toc/cam031/2002034805.html>.

Klemens:2009:MDT

- [Kle09] Ben Klemens. *Modeling with data: tools and techniques for scientific computing*. Princeton University Press, Princeton, NJ, USA, 2009. ISBN 0-691-13314-X (hardcover). xiii + 454 pp. LCCN QA276 .K546 2009. URL <http://www.loc.gov/catdir/toc/ecip0821/2008028341.htm>.

Komzsik:2003:LME

- [Kom03] Louis Komzsik. *The Lanczos method: evolution and application*. Software, environments, tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2003. ISBN 0-89871-537-7 (paperback). xii + 87 pp. LCCN QA76.9.M35 .K66 2003. URL <http://www.loc.gov/catdir/enhancements/fy0708/2002044643-d.html>; <http://www.loc.gov/catdir/enhancements/fy0708/2002044643-t.html>.

- Kaushal:2000:AMM**
- [KP00] Radhey Shyam Kaushal and D. Parashar. *Advanced methods of mathematical physics*. Alpha Science International, Pangbourne, UK, 2000. ISBN 1-84265-017-3. xviii + 508 pp. LCCN QC20 .K39 2000.
- Kressner:2005:NMG**
- [Kre05] Daniel Kressner. *Numerical Methods for General and Structured Eigenvalue Problems*, volume 46 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. CODEN LNCSA6. ISBN 3-540-24546-4 (print), 3-540-28502-4 (e-book). ISSN 1439-7358. xiv + 258 pp. LCCN QA193 .K745 2005. URL <http://link.springer.com/book/10.1007/3-540-28502-4>; <http://www.cs.umu.se/~kressner/book.php>.
- Kaipio:2005:SCI**
- [KS05a] Jari Kaipio and Erkki Somersalo. *Statistical and computational inverse problems*, volume 160 of *Applied mathematical sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 0-387-22073-9. xvi + 339 pp. LCCN QA1 .A647 vol. 160 QA377. URL <http://www.loc.gov/catdir/enhancements/fy0662/2004049181-d.html>; <http://www.loc.gov/catdir/enhancements/fy0818/2004049181-t.html>.
- Kythe:2005:HCM**
- [KS05b] Prem K. Kythe and Michael R. Schäferkotter. *Handbook of computational methods for integration*. Chapman and Hall/CRC, Boca Raton, FL, USA, 2005. ISBN 1-58488-428-2. xxii + 598 pp. LCCN QA299.3 .K98 2005.
- Kuncicky:2004:MP**
- [Kun04] David C. Kuncicky. *Matlab programming*. ESource—the Prentice Hall engineering source. Pearson Education, Upper Saddle River, NJ, USA, 2004. ISBN 0-13-035127-X. xviii + 267 pp. LCCN QA297 .K768 2004.
- Lang:2000:AMS**
- [Lan00] Jens Lang. *Adaptive multilevel solution of nonlinear parabolic PDE systems: theory, algorithm, and applications*, volume 16 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc.,

2000. ISBN 3-540-67900-6. ISSN 1439-7358. xii + 157 pp. LCCN QA377 .L353 2000.

Langtangen:2008:PSC

- [Lan08] Hans Petter Langtangen. *Python Scripting for Computational Science*, volume 3 of *Springer eBook Collection Mathematics and Statistics [Dig. Serial]; Springer-11649 [Dig. Serial]; Texts in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2008. ISBN 3-540-73915-7, 3-540-73916-5. xxiv + 750 pp. LCCN ????

Larsson:2005:PDE

- [Lar05] Stig Larsson. *Partial differential equations with numerical methods*, volume 45 of *Texts in applied math*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 3-540-01772-0 (hardcover). ix + 259 pp. LCCN ????

Law:2005:ISC

- [Law05] Alan Law. *Introduction To Scientific Computing Using Matlab*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2005. ISBN 0-13-033369-7. ??? pp. LCCN ????

Langtangen:2000:AST

- [LBQ00] Hans Petter Langtangen, A. M. (Are Magnus) Bruaset, and Ewald Quak. *Advances in software tools for scientific computing*, volume 10 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. ISBN 3-540-66557-9 (softcover). ISSN 1439-7358. vii + 356 pp. LCCN QA76.6 .A336 2000.

Leader:2004:NAS

- [Lea04] Jeffery J. Leader. *Numerical analysis and scientific computation*. Pearson/Addison Wesley, Boston, MA, USA, 2004. ISBN 0-201-73499-0. xiii + 590 pp. LCCN QA297 .L384 2004.

LeVeque:2002:FVM

- [LeV02] Randall J. LeVeque. *Finite volume methods for hyperbolic problems*. Cambridge texts in applied mathematics. Cambridge University Press, Cambridge, UK, 2002. ISBN 0-521-81087-6, 0-521-00924-3 (paperback). xix + 558 pp. LCCN QA377 .L41566 2002. URL <http://www.loc.gov/catdir/description/cam022/2001052642.html>; <http://www.loc.gov/catdir/samples/>

- cam033/2001052642.html; <http://www.loc.gov/catdir/toc/fy03052642.html>.
Liu:2004:MMP
- [Liu04] Lianshou Liu. *Methods of mathematical physics*. Rinton Press, Princeton, NJ, USA, 2004. ISBN 1-58949-045-2. xiii + 404 pp. LCCN ????
- Liu:2006:EMM**
- [Liu06] Lianshou Liu. *Exercises in methods of mathematical physics*. Rinton Press, Princeton, NJ, USA, 2006. ISBN 1-58949-049-5. 320 pp. LCCN ????
- Larsson:2003:PDE**
- [LT03] S. (Stig) Larsson and Vidar Thomée. *Partial differential equations with numerical methods*, volume 43 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. ISBN 3-540-01772-0. ISSN 0939-2475. ix + 259 pp. LCCN QA374 .L337 2003. URL <http://www.loc.gov/catdir/enhancements/fy0813/2003050595-d.html>.
- Li:2005:NAA**
- [LVW05] Zhilin Li, Lubin Vulkov, and Jerzy Waśniewski, editors. *Numerical analysis and its applications: third international conference, NAA 2004, Rousse, Bulgaria, June 29–July 3, 2004. Revised selected papers*, volume 3401 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. CODEN LNCSD9. ISBN 3-540-24937-0 (softcover). ISSN 0302-9743. LCCN QA297 .N8415. URL <http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=3401>; <http://www.springerlink.com/openurl.asp?genre=volume&id=doi:10.1007/b106395>.
- Linz:2003:ENM**
- [LW03] Peter Linz and Richard Wang. *Exploring numerical methods: an introduction to scientific computing using MATLAB*. Jones and Bartlett Publishers, Boston, MA, USA, 2003. ISBN 0-7637-1499-2. xii + 473 pp. LCCN QA297 .L54 2003.
- Landau:2005:FCS**
- [LWA⁺05] Rubin H. Landau, Robyn Wangberg, Kyle Augustson, M. J. Páez, C. C. Bordeianu, and C. Barnes. *A first course in scientific computing: symbolic, graphic, and numeric modeling using Maple*,

Java, Mathematica, and Fortran90. Princeton University Press, Princeton, NJ, USA, 2005. ISBN 0-691-12183-4 (hardcover). xxiv + 481 pp. LCCN Q183.9 .L36 2005. URL <http://www.loc.gov/catdir/enhancements/fy0668/2004062443-d.html>; <http://www.loc.gov/catdir/enhancements/fy0668/2004062443-t.html>; <http://www.loc.gov/catdir/enhancements/fy0734/2004062443-b.html>.

Lyshevski:2003:ESC

- [Lys03] Sergey Edward Lyshevski. *Engineering and Scientific Computations Using MATLAB.* Wiley, New York, NY, USA, 2003. ISBN 0-471-46200-4. x + 227 pp. LCCN TA345 .L97 2003. US\$59.95. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/bios/wiley045/2003278438.html>; <http://www.loc.gov/catdir/description/wiley041/2003278438.html>; <http://www.loc.gov/catdir/toc/wiley041/2003278438.html>.

Maillet:2000:TQS

- [Mai00] Denis Maillet, editor. *Thermal quadrupoles: solving the heat equation through integral transforms.* Wiley, New York, NY, USA, 2000. ISBN 0-471-98320-9. xiii + 370 pp. LCCN QA377 .T48 2000. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/description/wiley032/00039931.html>; <http://www.loc.gov/catdir/toc/onix03/00039931.html>.

Mak:2003:JNC

- [Mak03] Ronald Mak. *Java Number Cruncher: The Java Programmer's Guide to Numerical Computing.* Prentice-Hall PTR, Upper Saddle River, NJ 07458, USA, 2003. ISBN 0-13-046041-9. xi + 464 pp. LCCN QA76.73.J38 M335 2003.

Mallat:2009:WTS

- [Mal09] S. G. (Stéphane G.) Mallat. *A Wavelet Tour of Signal Processing: The Sparse Way.* Elsevier Academic Press, Amsterdam, The Netherlands, third edition, 2009. ISBN 0-12-374370-2. xx + 805 pp. LCCN TK5102.9 .M34 2009.

McMahon:2007:MD

- [McM07] David (David M.) McMahon. *MATLAB demystified.* McGraw-Hill, New York, NY, USA, 2007. ISBN 0-07-148551-1. viii +

326 pp. LCCN QA297 .M427 2007. URL <http://www.loc.gov/catdir/enhancements/fy0712/2007013608-b.html>; <http://www.loc.gov/catdir/enhancements/fy0712/2007013608-d.html>; <http://www.loc.gov/catdir/enhancements/fy0712/2007013608-t.html>.

Meister:2005:NLG

- [Mei05] Andreas Meister. *Numerik linearer Gleichungssysteme: eine Einführung in moderne Verfahren: mit MATLAB-Implementierung von C. Vömel.* (German) [Numerical linear equation systems: an introduction to modern methods: with a MATLAB implementation by C. Vömel]. Friedrich Vieweg und Sohn, Braunschweig, Germany, second edition, 2005. ISBN 3-528-13135-7. ix + 234 pp. LCCN ????

Meurant:2006:LCG

- [Meu06] Gérard A. Meurant. *The Lanczos and conjugate gradient algorithms: from theory to finite precision computations.* Software, environments, tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2006. ISBN 0-89871-616-0. xv + 365 pp. LCCN QA218 .M48 2006. URL <http://www.loc.gov/catdir/enhancements/fy0710/2006044391-d.html>; <http://www.loc.gov/catdir/enhancements/fy0733/2006044391-b.html>; <http://www.loc.gov/catdir/toc/fy0707/2006044391.html>.

Meyer:2000:MAA

- [Mey00] C. D. (Carl Dean) Meyer. *Matrix analysis and applied linear algebra.* Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2000. ISBN 0-89871-454-0. xii + 718 pp. LCCN QA188 .M495 2000. URL <http://www.loc.gov/catdir/enhancements/fy0668/00029725-d.html>; <http://www.loc.gov/catdir/enhancements/fy0668/00029725-t.html>.

Mathews:2004:NMU

- [MF04] John H. Mathews and Kurtis D. Fink. *Numerical methods using MATLAB.* Pearson, Upper Saddle River, NJ, USA, fourth edition, 2004. ISBN 0-13-065248-2. ix + 680 pp. LCCN QA297 .M39 2004.

Moore:2009:IIA

- [MKC09] Ramon E. Moore, R. Baker Kearfott, and Michael J. Cloud. *Introduction to interval analysis.* Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2009. ISBN 0-89871-669-1. xii + 223 pp. LCCN QA297.75 .M656 2009. URL <http://>

//www.loc.gov/catdir/enhancements/fy0906/2008042348-b.html; http://www.loc.gov/catdir/enhancements/fy0906/2008042348-d.html; http://www.loc.gov/catdir/enhancements/fy0906/2008042348-t.html.

Moin:2001:FEN

- [Moi01] Parviz Moin. *Fundamentals of engineering numerical analysis*. Cambridge University Press, Cambridge, UK, 2001. ISBN 0-521-80140-0, 0-521-80526-0 (paperback). xiv + 209 pp. LCCN TA335 .M65 2001. URL <http://www.loc.gov/catdir/description/cam021/00052933.html>; <http://www.loc.gov/catdir/toc/cam029/00052933.html>.

Moler:2004:NCM

- [Mol04] Cleve B. Moler. *Numerical computing with MATLAB*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2004. ISBN 0-89871-560-1 (paperback). xi + 336 pp. LCCN QA297 .M625 2004. US\$42.50.

Moler:2008:NCM

- [Mol08] Cleve B. Moler. *Numerical computing with MATLAB*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, second edition, 2008. ISBN 0-89871-660-8 (hardcover), 0-89871-560-1 (paperback), 0-89871-795-7 (e-book). xi + 336 pp. LCCN QA297 .M625 2008.

Monahan:2001:NMS

- [Mon01] John F. Monahan. *Numerical methods of statistics*. Cambridge series in statistical and probabilistic mathematics. Cambridge University Press, Cambridge, UK, 2001. ISBN 0-521-79168-5. xiv + 428 pp. LCCN QA276.4 .M65 2001. URL <http://www.loc.gov/catdir/description/cam021/00031269.html>; <http://www.loc.gov/catdir/toc/cam024/00031269.html>.

Marasco:2001:SCM

- [MR01] Addolorata Marasco and Antonio Romano. *Scientific computing with Mathematica: mathematical problems for ordinary differential equations*. Modeling and simulation in science, engineering, and technology. Birkhäuser Verlag, Basel, Switzerland, 2001. ISBN 0-8176-4205-6, 3-7643-4205-6. xiv + 270 pp. LCCN QA371.5.D37 M37 2001.

- Nakamura:2002:NAG**
- [Nak02] Shoichiro Nakamura. *Numerical analysis and graphic visualization with MATLAB*. Prentice-Hall PTR, Upper Saddle River, NJ 07458, USA, second edition, 2002. ISBN 0-13-065489-2. xiii + 519 pp. LCCN T385 .N34 2002.
- Neumaier:2001:INA**
- [Neu01] Arnold Neumaier. *Introduction to Numerical Analysis*. Cambridge University Press, Cambridge, UK, 2001. ISBN 0-521-33323-7, 0-521-33610-4 (paperback). viii + 356 pp. LCCN QA297 .N48 2001. URL <http://www.loc.gov/catdir/description/cam021/00066713.html>; <http://www.loc.gov/catdir/toc/cam022/00066713.html>.
- Nocedal:2006:NO**
- [NW06] Jorge Nocedal and Stephen J. Wright. *Numerical Optimization*. Springer series in operations research. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 2006. ISBN 0-387-30303-0 (hardcover). xxii + 664 pp. LCCN QA402.5 .N62 2006. URL <http://www.loc.gov/catdir/enhancements/fy0818/2006923897-d.html>; <http://www.loc.gov/catdir/enhancements/fy0818/2006923897-t.html>.
- Otto:2005:IPN**
- [OD05] Stephen R. Otto and James P. Denier. *An introduction to programming and numerical methods in MATLAB*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 1-85233-919-5. xvi + 463 pp. LCCN ???? UK£25.00.
- OLeary:2009:SCC**
- [O'L09] Dianne P. O'Leary. *Scientific Computing with Case Studies*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2009. ISBN 0-89871-666-7. xvi + 383 pp. LCCN QA401 .O44 2009. URL <http://www.loc.gov/catdir/enhancements/fy0906/2008031493-b.html>; <http://www.loc.gov/catdir/enhancements/fy0906/2008031493-d.html>; <http://www.loc.gov/catdir/enhancements/fy0906/2008031493-t.html>.
- Overton:2001:NCI**
- [Ove01] Michael L. Overton. *Numerical Computing with IEEE Floating Point Arithmetic, Including One Theorem, One Rule of Thumb,*

and One Hundred and One Exercises. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2001. ISBN 0-89871-482-6 (hardcover), 0-89871-571-7 (paperback), 0-89871-807-4 (ebook). xiv + 104 pp. LCCN QA76.9.M35 O94 2001. US\$40.00. URL <http://www.cs.nyu.edu/cs/faculty/overton/book/>; <http://www.siam.org/catalog/mcc07/ot76.htm>.

Palm:2001:IME

- [Pal01] William J. (William John) Palm III. *Introduction to MATLAB 6 for engineers.* Basic engineering series and tools. McGraw-Hill, New York, NY, USA, 2001. ISBN 0-07-234983-2 (paperback). xix + 600 pp. LCCN TA345 .P35 2001.

Palm:2005:IME

- [Pal05] William J. (William John) Palm III. *Introduction to MATLAB 7 for engineers.* McGraw-Hill, New York, NY, USA, second edition, 2005. ISBN 0-07-254818-5, 0-07-292242-7. xiii + 682 pp. LCCN TA345 .P355 2005.

Pharr:2005:GGP

- [PF05] Matt Pharr and Randima Fernando, editors. *GPU gems 2: programming techniques for high-performance graphics and general-purpose computation*, volume 2 of *GPU gems*. Addison-Wesley, Reading, MA, USA, 2005. ISBN 0-321-33559-7 (hardcover). xl ix + 814 pp. LCCN T385 .G688 2005. URL <http://www-docs.tu-cottbus.de/bibliothek/public/katalog/420569.PDF>; <http://www.loc.gov/catdir/toc/ecip055/2004030181.html>.

Penny:2000:NMU

- [PL00] J. E. T. (John E. T.) Penny and G. R. (George R.) Lindfield. *Numerical methods using Matlab.* Prentice-Hall, Upper Saddle River, NJ 07458, USA, second edition, 2000. ISBN 0-13-012641-1 (paper). xiii + 482 pp. LCCN QA297 .P45 2000.

Plato:2003:CNM

- [Pla03] Robert Plato. *Concise numerical mathematics*, volume 57 of *Graduate studies in mathematics*. American Mathematical Society, Providence, RI, USA, 2003. ISBN 0-8218-2953-X, 0-8218-3414-2 (softcover). ISSN 1065-7339. xiv + 453 pp. LCCN QA297 .P56713 2003.

Pozrikidis:2002:PGB

- [Poz02] C. (Constantine) Pozrikidis. *A practical guide to boundary element methods with the software library BEMLIB.* Chapman and

Hall/CRC, Boca Raton, FL, USA, 2002. ISBN 1-58488-323-5. xiii + 423 pp. LCCN TA347.B69 P69 2002. URL <http://www.loc.gov/catdir/enhancements/fy0646/2002024166-d.html>; <http://www.loc.gov/catdir/toc/fy034/2002024166.html>.

Press:2007:NRA

- [PTVF07] William H. Press, Saul A. Teukolsky, William T. Vetterling, and Brian P. Flannery. *Numerical Recipes — The Art of Scientific Computing*. Cambridge University Press, Cambridge, UK, third edition, 2007. ISBN 0-521-88068-8 (hardcover), 0-521-88407-1 (with source code CD ROM), 0-521-70685-8 (source code CD ROM). xxi + 1235 pp. LCCN QA297 .N866 2007. URL <http://www.cambridge.org/numericalrecipes>.

Quarteroni:2003:SCM

- [QS03] Alfio Quarteroni and Fausto Saleri. *Scientific computing with MATLAB*, volume 2 of *Texts in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. ISBN 3-540-44363-0 (hard cover). ISSN 1611-0994. ix + 257 pp. LCCN Q183.9 .Q8313 2003. URL <http://www.loc.gov/catdir/enhancements/fy0826/2003054782-d.html>.

Quarteroni:2006:SCM

- [QS06] Alfio Quarteroni and Fausto Saleri. *Scientific computing with MATLAB and Octave*, volume 2 of *Texts in computational science and engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 2006. ISBN 3-540-32612-X. xvi + 318 pp. LCCN Q183.9 .Q8313 2006. URL <http://www.loc.gov/catdir/enhancements/fy0814/2006928277-d.html>; <http://www.loc.gov/catdir/toc/fy0708/2006928277.html>.

Quarteroni:2000:NM

- [QSS00] Alfio Quarteroni, Riccardo Sacco, and Fausto Saleri. *Numerical mathematics*, volume 37 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. ISBN 0-387-98959-5. xx + 654 pp. LCCN QA297 .Q83 2000.

Rahman:2005:ANA

- [Rah05] M. (Matiur) Rahman. *Applied numerical analysis*. WIT, Southampton, UK, 2005. ISBN 1-85312-891-0. 392 pp. LCCN QA371 .R284 2005.

Rao:2002:ANM

- [Rao02] Singiresu S. Rao. *Applied Numerical Methods for Engineers and Scientists*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2002. ISBN 0-13-089480-X. xx + 1080 pp. LCCN TA345 .R36 2002.

Recktenwald:2000:NMM

- [Rec00] Gerald W. Recktenwald. *Numerical methods with MATLAB: implementations and applications*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2000. ISBN 0-13-030802-1, 0-201-30860-6. xxviii + 786 pp. LCCN TA345 .R43 2000.

Richards:2002:AMM

- [Ric02] Derek Richards. *Advanced mathematical methods with Maple*. Cambridge University Press, Cambridge, UK, 2002. ISBN 0-521-77010-6, 0-521-77981-2 (paperback). xv + 862 pp. LCCN QA297 .R495 2002.

Ritter:2000:ACA

- [Rit00] Klaus Ritter. *Average-Case Analysis of Numerical Problems*, volume 1733 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. CODEN LNMAA2. ISBN 3-540-67449-7 (print), 3-540-45592-2 (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). ix + 254 pp. LCCN QA3 .L28 no. 1733; QA3.L28 no. 1733 QA297. URL <http://link.springer.com/book/10.1007/BFb0103934>; <http://www.loc.gov/catdir/enhancements/fy0816/00030799-d.html>; <http://www.loc.gov/catdir/enhancements/fy0816/00030799-t.html>; <http://www.springerlink.com/content/978-3-540-45592-9>.

Romano:2006:CMU

- [RLM06] Antonio Romano, Renato Lancellotta, and Addolorata Marasco. *Continuum mechanics using Mathematica: fundamentals, applications, and scientific computing*. Modeling and simulation in science, engineering, and technology. Birkhäuser Verlag, Basel, Switzerland, 2006. ISBN 0-8176-3240-9. xii + 388 pp. LCCN QA808.2 .R66 2004. Includes CD-ROM.

Robert:2005:LAE

- [Rob05] Alain Robert. *Linear algebra: examples and applications*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA;

River Edge, NJ, USA, 2005. ISBN 981-256-432-2, 981-256-499-3 (paperback). xiv + 372 pp. LCCN QA184.2 .R63 2005.

Radjavi:2000:ST

- [RR00] Heydar Radjavi and Peter Rosenthal. *Simultaneous Triangularization*. Universitext. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. ISBN 0-387-98467-4 (hardcover), 0-387-98466-6 (paperback), 1-4612-1200-6 (e-book). xii + 318 pp. LCCN QA197 .R33 2000. URL <http://www.loc.gov/catdir/enhancements/fy0815/99023772-d.html>; <http://www.loc.gov/catdir/enhancements/fy0815/99023772-t.html>.

Ralston:2001:FCN

- [RR01] Anthony Ralston and Philip Rabinowitz. *A first course in numerical analysis*. Dover, New York, NY, USA, second edition, 2001. ISBN 0-486-41454-X (paperback). xviii + 556 + 50 pp. LCCN QA297 .R3 2001. URL <http://www.loc.gov/catdir/description/doover032/00064343.html>; <http://www.loc.gov/catdir/toc/doover031/00064343.html>.

Saad:2003:IMS

- [Saa03] Yousef Saad. *Iterative methods for sparse linear systems*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, second edition, 2003. ISBN 0-89871-534-2 (paperback). xviii + 528 pp. LCCN QA188 .S17 2003. URL <http://www.loc.gov/catdir/enhancements/fy0665/2002044644-d.html>; <http://www.loc.gov/catdir/enhancements/fy0665/2002044644-t.html>.

Stoer:2002:INA

- [SB02] Josef Stoer and Roland Bulirsch. *Introduction to numerical analysis*, volume 12 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2002. ISBN 0-387-95452-X. xv + 744 pp. LCCN QA297 .S8213 2002. URL <http://www.loc.gov/catdir/enhancements/fy0817/2002019729-d.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2002019729-t.html>.

Schatzman:2002:NAM

- [Sch02] Michelle Schatzman. *Numerical analysis: a mathematical introduction*. Clarendon Press, New York, NY, USA, 2002. ISBN 0-19-850279-6, 0-19-850852-2 (paperback). xix + 496 pp.

LCCN QA297 .S36713 2002. URL <http://catdir.loc.gov/catdir/enhancements/fy0613/2002041475-d.html>; <http://catdir.loc.gov/catdir/enhancements/fy0613/2002041475-t.html>; <http://www.gbv.de/dms/goettingen/328400629.pdf>.

Sigmon:2002:MP

- [SD02] Kermit Sigmon and Timothy A. Davis. *MATLAB primer*. Chapman and Hall/CRC, Boca Raton, FL, USA, sixth edition, 2002. ISBN 1-58488-294-8 (paperback). xii + 163 pp. LCCN QA297 .S4787 2002. US\$16.95, UK£11.99.

Serre:2002:MTA

- [Ser02] Dénis Serre. *Matrices: Theory and Applications*, volume 216 of *Graduate Texts in Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 0-387-95460-0, 0-387-22758-X (e-book). xvi + 202 pp. LCCN QA188 .S4713 2002. URL <http://link.springer.com/book/10.1007/b98899>; <http://www.loc.gov/catdir/enhancements/fy0817/2002022926-b.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2002022926-d.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2002022926-t.html>; <http://www.springerlink.com/openurl.asp?genre=book&isbn=978-0-387-95460-8>. Translated from the 2001 French original.

Schilling:2000:ANM

- [SH00] Robert J. (Robert Joseph) Schilling and Sandra L. Harris. *Applied numerical methods for engineers using MATLAB and C*. Brooks/Cole, Pacific Grove, CA, USA, 2000. ISBN 0-534-37014-4. xx + 715 pp. LCCN TA345 .S34 2000. CD-ROM contains NLIB version 1.0.

Shapira:2006:SPC

- [Sha06] Yair Shapira. *Solving PDEs in C++: numerical methods in a unified object-oriented approach*. Computational science and engineering. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2006. ISBN 0-89871-601-2 (paperback). xxiii + 500 pp. LCCN QA377 .S466 2006. URL <http://www.loc.gov/catdir/enhancements/fy0708/2005054086-d.html>; <http://www.loc.gov/catdir/enhancements/fy0708/2005054086-t.html>.

Shapira:2009:MOC

- [Sha09] Yair Shapira. *Mathematical objects in C++: computational tools in a unified object-oriented approach*. Chapman and Hall/CRC numerical analysis and scientific computing. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, 2009. ISBN 1-4398-1147-4. xxviii + 606 pp. LCCN QA297 .S464 2009.

Steeb:2004:PSS

- [SHHS04] W.-H. Steeb, Yorick Hardy, Alexandre Hardy, and Ruedi Stoop. *Problems and solutions in scientific computing: with C++ and Java simulations*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2004. ISBN 981-256-112-9, 981-256-125-0 (paperback). ix + 420 pp. LCCN QA297 .P743 2004.

Suli:2003:INA

- [SM03] Endre Süli and D. F. (David Francis) Mayers. *An Introduction to Numerical Analysis*. Cambridge University Press, Cambridge, UK, 2003. ISBN 0-521-81026-4, 0-521-00794-1 (paperback). x + 433 pp. LCCN QA297 .S873 2003. URL <http://www.loc.gov/catdir/description/cam041/2003273860.html>; <http://www.loc.gov/catdir/samples/cam041/2003273860.html>; <http://www.loc.gov/catdir/toc/cam041/2003273860.html>.

Stanoyevitch:2005:IMN

- [Sta05a] Alexander Stanoyevitch. *Introduction to MATLAB with numerical preliminaries*. Wiley-Interscience, New York, NY, USA, 2005. ISBN 0-471-69737-0. x + 331 pp. LCCN TA345 .S75 2005. URL <http://www.loc.gov/catdir/enhancements/fy0618/2004053006-b.html>; <http://www.loc.gov/catdir/enhancements/fy0618/2004053006-d.html>; <http://www.loc.gov/catdir/toc/wiley051/2004053006.html>.

Stanoyevitch:2005:INO

- [Sta05b] Alexander Stanoyevitch. *Introduction to numerical ordinary and partial differential equations using MATLAB*. Pure and applied mathematics. Wiley-Interscience, New York, NY, USA, 2005. ISBN 0-471-69738-9 (hardcover). xiv + 813 pp. LCCN QA371.5.D37 .S78 2005. URL <http://www.loc.gov/catdir/enhancements/fy0618/2004058042-b.html>; <http://www.loc.gov/catdir/enhancements/fy0618/2004058042-d.html>; <http://www.loc.gov/catdir/toc/wiley051/2004058042.html>.

- Stewart:2001:MAV**
- [Ste01] G. W. Stewart. *Matrix Algorithms. Volume II: Eigensystems*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2001. ISBN 0-89871-503-2. xix + 469 pp. LCCN QA188 .S714 1998 v.2.
- Stetter:2004:NPA**
- [Ste04] Hans J. Stetter. *Numerical polynomial algebra*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2004. ISBN 0-89871-557-1 (paperback). xv + 472 pp. LCCN QA161.P59 S74 2004. URL <http://www.loc.gov/catdir/enhancements/fy0665/2004041691-d.html>; <http://www.loc.gov/catdir/enhancements/fy0665/2004041691-t.html>.
- Schilders:2005:SVN**
- [StM05] W. H. A. Schilders and E. J. W. ter Maten. *Special volume: numerical methods in electromagnetics*, volume 13 of *Handbook of numerical analysis*. Elsevier, Amsterdam, The Netherlands, 2005. ISBN 0-444-51375-2. 500 pp. LCCN QA297 .H287 1989 vol. 13.
- Strang:2007:CSE**
- [Str07] Gilbert Strang. *Computational science and engineering*. Wellesley-Cambridge Press, Wellesley, MA, USA, 2007. ISBN 0-9614088-1-2. xi + 716 pp. LCCN TA330 .S73 2007; TA330 .S75 2007.
- Strang:2009:ILA**
- [Str09] Gilbert Strang. *Introduction to linear algebra*. Wellesley-Cambridge Press, Wellesley, MA, USA, fourth edition, 2009. ISBN 0-9802327-1-6. ix + 574 pp. LCCN QA184 .S77 2009.
- Trefethen:2005:SP**
- [TE05] Lloyd N. Trefethen and Mark Embree. *Spectra and pseudospectra*. Princeton University Press, Princeton, NJ, USA, 2005. ISBN 0-691-11946-5. xviii + 606 pp. The behavior of nonnormal matrices and operators.
- Travis:2000:IAL**
- [Tra00] Jeffrey Travis. *Internet applications in LabVIEW*. National instruments virtual instrumentation series. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 2000. ISBN 0-13-014144-5 (paperback/CD-ROM). xix + 601 pp. LCCN Q185 .T83 2000.

- Trefethen:2000:SMM**
- [Tre00] Lloyd N. Trefethen. *Spectral Methods in MATLAB*. Software, environments, tools. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2000. ISBN 0-89871-465-6 (paperback), 0-89871-959-3 (e-book). xvi + 165 pp. LCCN QA377 .T65 2000.
- Turner:2000:GSC**
- [Tur00] P. R. (Peter R.) Turner. *Guide to scientific computing*. Macmillan mathematical guides. Macmillan Publishing Company, New York, NY, USA, second edition, 2000. ISBN 0-333-79450-8. ix + 301 pp. LCCN QA297 .T88 2000.
- Turner:2001:GSC**
- [Tur01] P. R. (Peter R.) Turner. *Guide to scientific computing*. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, second edition, 2001. ISBN 0-8493-1242-6 , 0-333-79450-8. ix + 301 pp. LCCN QA297 .T88 2001.
- Tveito:2005:IPD**
- [TW05] Aslak Tveito and Ragnar Winther. *Introduction to partial differential equations: a computational approach*, volume 29 of *Texts in applied mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., corr. 2nd print. edition, 2005. ISBN 3-540-22551-X. xv + 392 pp. LCCN QA377 .T9 2005. URL <http://www.loc.gov/catdir/enhancements/fy0823/2004111961-d.html>; <http://www.loc.gov/catdir/enhancements/fy0823/2004111961-t.html>.
- Urroz:2001:NSMa**
- [Urr01a] Gilberto E. Urroz. *Numerical and Statistical Methods with SCILAB for Science and Engineering*, volume 1. BookSurge Publishing, North Charleston, SC, USA, 2001. ISBN 1-58898-304-8. xv + 563 pp. LCCN TA345 .U77 2001.
- Urroz:2001:NSMb**
- [Urr01b] Gilberto E. Urroz. *Numerical and statistical methods with SCILAB for science and engineering*, volume 2. Greatunpublished.com, Charleston, SC, USA, 2001. ISBN 1-58898-305-6. xv + 486 pp. LCCN TA345 .U77 2001.
- VanLoan:2000:ISC**
- [Van00a] Charles F. Van Loan. *Introduction to scientific computing: a matrix–vector approach using MATLAB*. The MATLAB curricu-

lum series. Prentice-Hall, Upper Saddle River, NJ 07458, USA, second edition, 2000. ISBN 0-13-949157-0. xi + 367 pp. LCCN QA76.9.M35 V375 2000.

VanRienen:2000:NMC

- [Van00b] Ursula Van Rienen. *Numerical methods in computational electrodynamics: linear systems in practical applications*, volume 12 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. ISBN 3-540-67629-5. ISSN 1439-7358. xii + 375 pp. LCCN QC631.3 .V36 2000.

Varga:2000:MIA

- [Var00] Richard S. Varga. *Matrix iterative analysis*, volume 27 of *Springer series in computational mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2nd rev. and expanded edition, 2000. ISBN 3-540-66321-5. ISSN 0179-3632. x + 358 pp. LCCN QA297.8 .V37 2000. URL <http://lcweb.loc.gov/catdir/toc/99050196.html>; <http://www.loc.gov/catdir/enhancements/fy0815/99050196-d.html>.

Varga:2004:GHC

- [Var04] Richard S. Varga. *Geršgorin and His Circles*, volume 36 of *Springer Series in Computational Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2004. ISBN 3-540-21100-4 (hardcover), 3-642-17798-0 (e-book). ISSN 0179-3632. x + 226 pp. LCCN QA193 .V37 2004. URL <http://www.loc.gov/catdir/enhancements/fy0815/2004104814-d.html>.

Varga:2009:MIA

- [Var09] Richard S. Varga. *Matrix Iterative Analysis*, volume 27 of *Springer series in computational mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second revised and expanded edition, 2009. ISBN 3-642-05154-5 (soft-cover), 3-642-05156-1 (e-book). ISSN 0179-3632 (print), 2198-3712 (electronic). x + 358 pp. LCCN QA263 .V3 2009.

vanDooren:2000:NAV

- [vDHvdV00] P. M. van Dooren, A. Hadjidimos, and H. A. van der Vorst, editors. *Numerical analysis 2000*, volume 3. Elsevier Science Publishers, Amsterdam, The Netherlands, 2000. ISBN 0-444-50598-9.

xii + 531 pp. LCCN QA184 .L67 2000. URL <http://www.loc.gov/catdir/enhancements/fy0614/2002282450-d.html>. Linear algebra—linear systems and eigenvalues, Reprint of J. Comput. Appl. Math. **123** (2000), no. 1–2 [MR1798517 (2001f:65003)].

Rienen:2001:NMC

- [vR01] Ursula van Rienan. *Numerical Methods in Computational Electrodynamics: Linear Systems in Practical Applications*. Number 12 in Lecture Notes in Computational Science and Engineering. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. ISBN 3-540-67629-5. xiii + 375 pp.

Vandebril:2008:MCS

- [VvBM08] Raf Vandebril, Marc van Barel, and Nicola Mastronardi. *Matrix Computations and Semiseparable Matrices*. The Johns Hopkins University Press, Baltimore, MD, USA, 2008. ISBN 0-8018-8714-3 (vol. 1, hardcover), 0-8018-9052-7 (vol. 2). xviii + 575 (vol. 1), xvi + 498 (vol. 2) pp. LCCN QA188 .V36 2008. URL <http://www.loc.gov/catdir/enhancements/fy0740/2007030657-b.html>; <http://www.loc.gov/catdir/enhancements/fy0740/2007030657-d.html>; <http://www.loc.gov/catdir/toc/ecip0723/2007030657.html>.

Vulkov:2001:NAA

- [VWY01] Lubin Vulkov, Jerzy Waśniewski, and Plamen Yalamov, editors. *Numerical Analysis and Its Applications: Second International Conference, NAA 2000, Rousse, Bulgaria, June 11–15, 2000 Revised Papers*, volume 1988 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. ISBN 3-540-45262-1, 3-540-45262-1 (e-book). LCCN QA297 .N8415 2001. URL <http://link.springer-ny.com/link/service/series/0558/tocs/t1988.htm>; <http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=1988>.

Watkins:2002:FMC

- [Wat02] David S. Watkins. *Fundamentals of Matrix Computations*. Pure and applied mathematics. Wiley-Interscience, New York, NY, USA, second edition, 2002. ISBN 0-471-21394-2. xiii + 618 pp. LCCN QA188 .W38 2002. URL <http://www.loc.gov/catdir/bios/wiley044/2002071332.html>; <http://www.loc.gov/catdir/description/wiley036/2002071332.html>; <http://www.loc.gov/catdir/toc/wiley023/2002071332.html>.

Watkins:2007:MEP

- [Wat07] David S. Watkins. *The matrix eigenvalue problem: GR and Krylov subspace methods*, volume 101 of *Other titles in applied mathematics*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2007. ISBN 0-89871-641-1. x + 442 pp. LCCN QA193 .W38 2007.

White:2004:CMM

- [Whi04] R. E. (Robert E.) White. *Computational Mathematics: Models, Methods, and Analysis with MATLAB and MPI*. Chapman and Hall/CRC, Boca Raton, FL, USA, 2004. ISBN 1-58488-364-2. xvi + 385 pp. LCCN QA297 .W495 2004. URL <http://www.loc.gov/catdir/enhancements/fy0646/2003055207-d.html>.

White:2007:EMM

- [Whi07] Robert E. White. *Elements of matrix modeling and computing with MATLAB(R)*. Chapman and Hall/CRC, Boca Raton, FL, USA, 2007. ISBN 1-58488-627-7. xvi + 402 pp.

Yang:2005:ANM

- [YCCM05] Won Young Yang, Wenwu Cao, Tae-Sang Chung, and John Morris. *Applied numerical methods using MATLAB*. Wiley-Interscience, New York, NY, USA, 2005. ISBN 0-471-69833-4 (hardcover). xiv + 509 pp. LCCN QA297 .Y36 2005. UK£50.50. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>; <http://www.loc.gov/catdir/enhancements/fy0616/2004013108-b.html>; <http://www.loc.gov/catdir/enhancements/fy0616/2004013108-d.html>; <http://www.loc.gov/catdir/toc/ecip0418/2004013108.html>.

Yost:2002:BGR

- [Yos02] Jeffrey R. Yost. *A Bibliographic Guide to Resources in Scientific Computing, 1945–1975*, volume 15 of *Bibliographies and indexes in library and information science, 0742-6879*. Greenwood Press, 88 Post Road West, Westport, CT 06881, USA, 2002. ISBN 0-313-31681-3. 263 pp. LCCN Z7405.D37 Y67 2002; Q183.9. URL <http://www.loc.gov/catdir/toc/fy035/2002069622.html>.

Zarowski:2004:INA

- [Zar04] Christopher J. Zarowski. *An introduction to numerical analysis for electrical and computer engineers*. Wiley, New York, NY, USA, 2004. ISBN 0-471-46737-5. xvi + 586 pp. LCCN

TK153 .Z37 2004. URL <http://www.loc.gov/catdir/bios/wiley046/2003063761.html>; <http://www.loc.gov/catdir/description/wiley041/2003063761.html>; <http://www.loc.gov/catdir/toc/wiley041/2003063761.html>.

Zhang:2005:SCA

[Zha05]

Fuzhen Zhang, editor. *The Schur Complement and its Applications*, volume 4 of *Numerical Methods and Algorithms*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 0-387-24271-6 (hardcover), 0-387-24273-2 (e-book). xvi + 295 pp. LCCN QA184.2 .S38 2005. URL <http://www.loc.gov/catdir/enhancements/fy0663/2005042750-d.html>; <http://www.loc.gov/catdir/enhancements/fy0821/2005042750-t.html>.

Zimmerman:2004:PMS

[Zim04]

William B. J. Zimmerman. *Process modelling and simulation with finite element methods*, volume 15 of *Series on stability, vibration, and control of systems. Series A*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2004. ISBN 981-238-793-5. xii + 382 pp. LCCN TS183 .Z56 2004. URL <http://www.loc.gov/catdir/toc/fy0701/2006281168.html>.

Zienkiewicz:2006:FEA

[ZM06]

O. C. Zienkiewicz and K. (Kenneth) Morgan. *Finite elements and approximation*. Dover books on engineering. Dover, New York, NY, USA, Dover edition, 2006. ISBN 0-486-45301-4 (paperback). xii + 328 pp. LCCN QA297.5 .Z53 2006. URL <http://www.loc.gov/catdir/enhancements/fy0659/2006047436-d.html>; <http://www.loc.gov/catdir/toc/fy0705/2006047436.html>.

Zienkiewicz:2000:FEM

[ZT00]

O. C. Zienkiewicz and Robert L. (Robert Leroy) Taylor. *The finite element method*. Butterworth-Heinemann, Oxford, UK, fifth edition, 2000. ISBN 0-7506-5049-4 (vol. 1), 0-7506-5055-9 (vol. 2), 0-7506-5050-8 (vol. 3). xvi + 689 (vol. 1), xiv + 459 (vol. 2), xiv + 334 (vol. 3) pp. LCCN TA640.2 .Z5 2000. URL <http://www.loc.gov/catdir/description/els031/00710705.html>; <http://www.loc.gov/catdir/toc/els051/00710705.html>.