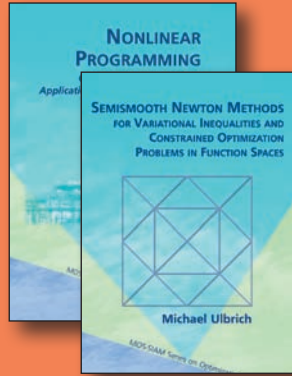
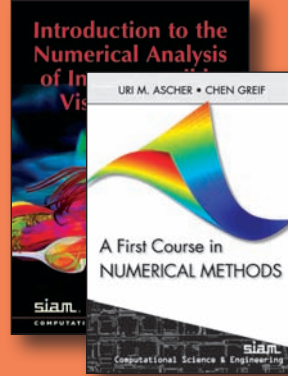


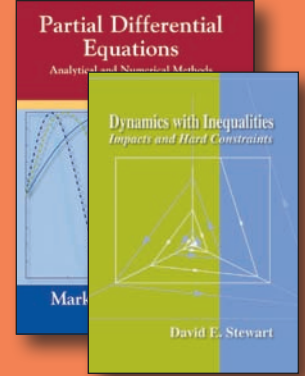
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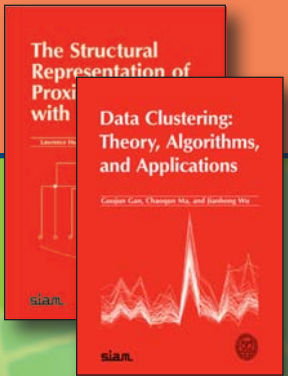
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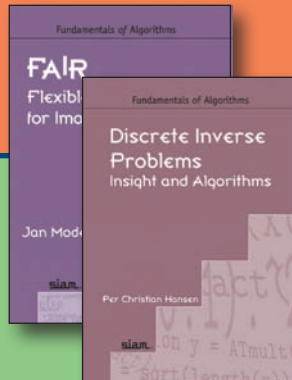
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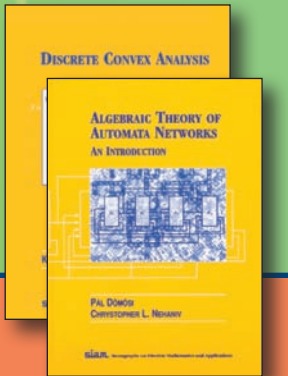
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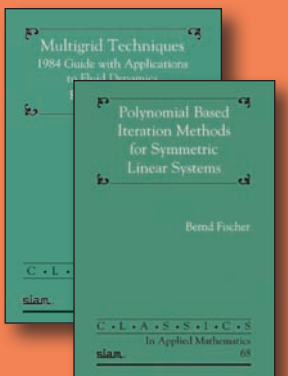
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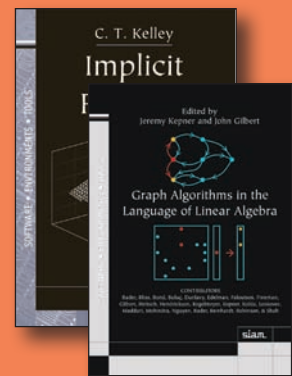
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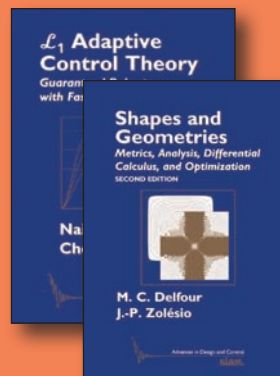
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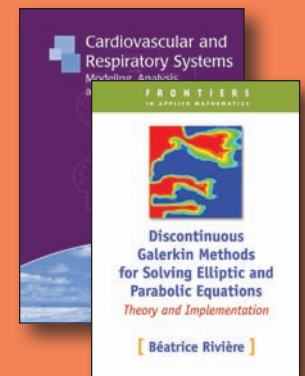
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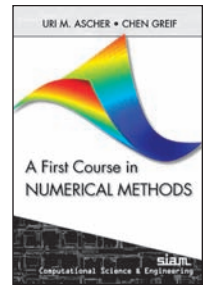
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Uri M. Ascher and Chen Greif

Computational Science and Engineering 7

This book is designed for students and researchers who seek practical knowledge of modern techniques in scientific computing. Avoiding encyclopedic and heavily theoretical exposition, the book provides an in-depth treatment of fundamental issues and methods, the reasons behind the success and failure of numerical software, and fresh and easy-to-follow approaches and techniques. The authors focus on current methods, issues, and software while providing a comprehensive theoretical foundation. The book includes a variety of exercises within each chapter along with review questions aimed at self-testing.

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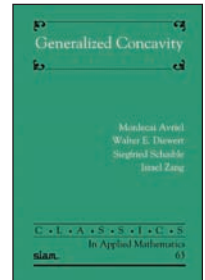
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Mordecai Avriel, Walter E. Diewert, Siegfried Schaible, and Israel Zang

Classics in Applied Mathematics 63

Originally published in 1988, this enduring text remains the most comprehensive book on generalized convexity and concavity. The authors present generalized concave functions in a unified framework, exploring them primarily from the domains of optimization and economics. Specific topics covered in this book include a review of concavity and the basics of generalized concavity; applications of generalized concavity to economics; special function forms such as composite forms, products, ratios, and quadratic functions; fractional programming; and concave transformable functions.

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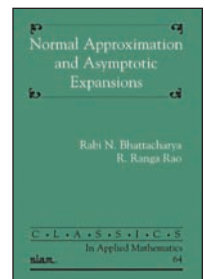
Normal Approximation and Asymptotic Expansions

Rabi N. Bhattacharya and R. Ranga Rao

Classics in Applied Mathematics 64

Although it was first published in 1976, this book has gained new significance and renewed interest among statisticians due to the developments of modern statistical techniques such as the bootstrap, the efficacy of which can be ascertained by asymptotic expansions. This also is the only book containing a detailed treatment of various refinements of the multivariate central limit theorem, including Berry–Essen-type error bounds for probabilities of general classes of functions and sets, and asymptotic expansions for both lattice and non-lattice distributions.

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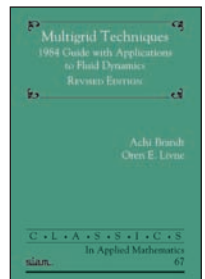
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Achi Brandt and Oren Livne

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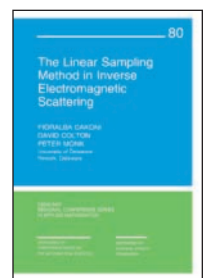
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Fioralba Cakoni, David Colton, and Peter Monk

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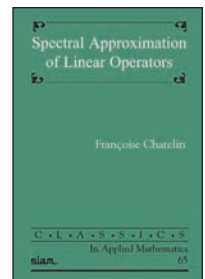
Spectral Approximation of Linear Operators

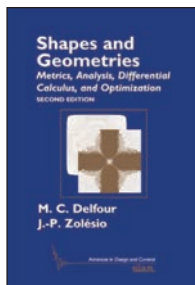
Françoise Chatelin

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This classic textbook provides a unified treatment of spectral approximation for closed or bounded operators as well as for matrices. Despite significant changes and advances in the field since it was first published in 1983, the book continues to form the theoretical bedrock for any computational approach to spectral theory over matrices or linear operators. This coverage of classical results is not readily available elsewhere. It includes many exercises (with solutions), making it a valuable textbook for graduate students and reference manual for self-study.

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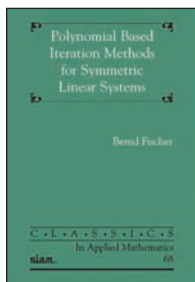
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Michel C. Delfour and Jean-Paul Zolésio

Advances in Design and Control 22

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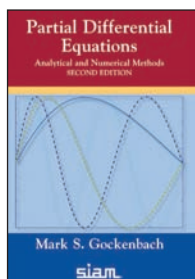
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Bernd Fischer

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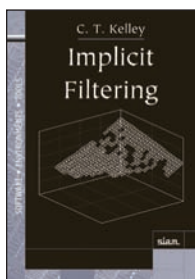


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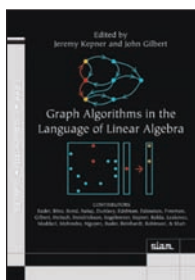
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C. T. Kelley

Software, Environments, and Tools 23

Implicit filtering is a way to solve bound-constrained optimization problems for which derivative information is not available. The author describes the algorithm, its convergence theory, and a new MATLAB® implementation, and includes three case studies. This book is unique in that it is the only one in the area of derivative-free or sampling methods and is accompanied by publicly available software. It is also designed as a software manual and as a reference for implicit filtering—one can approach the book as a consumer of the software, as a student, or as a researcher in sampling and derivative-free methods.

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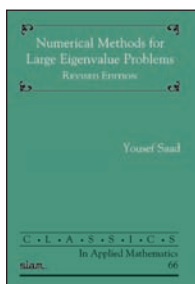
Graph Algorithms in the Language of Linear Algebra

Jeremy Kepner and John Gilbert, Editors

Software, Environments, and Tools 22

This book discusses the field of graph algorithms, one of the pillars of theoretical computer science, informing research in such diverse areas as combinatorial optimization, complexity theory, and topology. The authors show how to leverage existing parallel matrix computation techniques and the large amount of software infrastructure that exists for these computations to implement efficient and scalable parallel graph algorithms. This is suitable as the primary text for a class on linear algebraic graph algorithms and as either the primary or supplemental text for a class on graph algorithms for those without training in computer science.

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Yousef Saad

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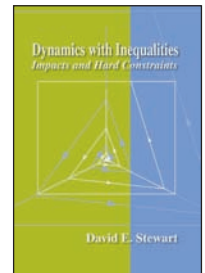
This revised edition discusses numerical methods for computing eigenvalues and eigenvectors of large sparse matrices. It provides an in-depth view of the numerical methods that are applicable for solving matrix eigenvalue problems that arise in various engineering and scientific applications. Each chapter has been updated and significant changes have been made to Chapters 6 through 8, which describe algorithms and their implementations. This book is intended for researchers as well as for practitioners, and it also can be used as a supplemental text for an advanced graduate-level course on these methods.

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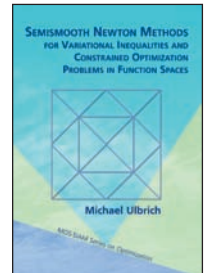
This is the only book that comprehensively addresses dynamics with inequalities. The author develops the theory and application of dynamical systems that incorporate some kind of hard inequality constraint, such as mechanical systems with impact; electrical circuits with diodes; and social and economic systems that involve natural or imposed limits (such as traffic flow, which can never be negative, or inventory, which must be stored within a given facility). The book demonstrates that hard limits—eschewed in most dynamical models—are natural models for many dynamic phenomena, and there are ways of creating differential equations with hard constraints that provide accurate models of many physical, biological, and economic systems.

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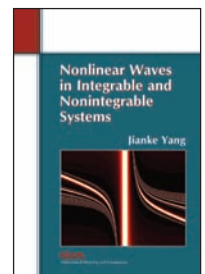
This book provides a comprehensive presentation of semismooth Newton methods in function spaces, striking a balance between thoroughly developed theory and numerical applications. Although largely self-contained, the book also covers recent developments in the field, such as state-constrained problems, and offers new material on topics such as improved mesh independence results. The theory and methods are applied to a range of practically important problems, including optimal control of semilinear elliptic differential equations, obstacle problems, and flow control of instationary Navier–Stokes fluids.

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<i>Topics in Surface Modeling</i> # Hans Hagen, Editor	978-0-898712-82-7	1992	OT30	\$95.00	\$66.50
<i>Mathematical Aspects of Geometric Modeling</i> Charles A. Micchelli	978-0-898713-31-2	1994	CB65	\$70.00	\$49.00
<i>Architectural Geometry</i> * Helmut Pottmann, Andreas Asperl, Michael Hofer, and Axel Kilian	978-1-934493-0-45	2007	BP01	\$175.00*	\$122.50*
<i>Designing Fair Curves and Surfaces: Shape Quality in Geometric Modeling and Computer-Aided Design</i> Nickolas S. Sapidis, Editor	978-0-898713-32-9	1994	OT44	\$110.00	\$77.00

GEOMETRIC DESIGN—GEOPHYSICAL SCIENCES—IMAGE PROCESSING—LINEAR ALGEBRA

TITLE/AUTHOR	ISBN	PUB YEAR	ORDER CODE	LIST PRICE	MEMBER PRICE
<i>Cardinal Spline Interpolation</i> I. J. Schoenberg	978-0-898710-09-0	1973	CB12	\$43.00	\$30.10

*academic prices available

GEOPHYSICAL SCIENCES

<i>The Mathematics of Reservoir Simulation</i> [#] Richard E. Ewing, Editor	978-0-89871-662-7	1984	FR01	\$67.50	\$47.25
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IMAGE PROCESSING

<i>Image Processing and Analysis: Variational, PDE, Wavelet, and Stochastic Methods</i> Tony F. Chan and Jianhong (Jackie) Shen	978-0-898715-89-7	2005	OT94	\$81.00	\$56.70
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<i>Introduction to the Mathematics of Medical Imaging, Second Edition</i> Charles L. Epstein	978-0-898716-42-9	2007	OT102	\$102.00	\$71.40
<i>Deblurring Images: Matrices, Spectra, and Filtering</i> [#] Per Christian Hansen, James G. Nagy, and Dianne P. O’Leary	978-0-898716-18-4	2006	FA03	\$68.00	\$47.60
<i>Principles of Computerized Tomographic Imaging</i> Avinash C. Kak and Malcolm Slaney	978-0-898714-94-4	2001	CL33	\$80.00	\$56.00
<i>FAIR: Flexible Algorithms for Image Registration</i> Jan Modersitzki	978-0-898716-90-0	2009	FA06	\$69.00	\$48.30
<i>The Mathematics of Computerized Tomography</i> Frank Natterer	978-0-898714-93-7	2001	CL32	\$81.00	\$56.70
<i>Mathematical Methods in Image Reconstruction</i> Frank Natterer and Frank Wübbeling	978-0-898716-22-1	2001	MM05	\$87.00	\$60.90

LINEAR ALGEBRA

<i>LAPACK Users’ Guide, Third Edition</i> [#] E. Anderson, Z. Bai, C. Baschof, S. Blackford, J. Demmel, J. Dongarra, J. Du Croz, A. Greenbaum, S. Hammarling, A. McKenney, and D. Sorensen	978-0-898714-47-0	1999	SE09	\$65.00	\$45.50
<i>Templates for the Solution of Algebraic Eigenvalue Problems</i> [#] Z. Bai, J. Demmel, J. Dongarra, A. Ruhe, and H. van der Vorst	978-0-898714-71-5	2000	SE11	\$82.50	\$57.75
<i>LAPACK95 Users’ Guide</i> [#] V. A. Barker, L. Susan Blackford, J. Dongarra, J. Du Croz, S. Hammarling, M. Marinova, J. Wasniewski, and P. Yalamov	978-0-898715-04-0	2001	SE13	\$67.50	\$47.25
<i>Templates for the Solution of Linear Systems</i> [#] R. Barrett, M. Berry, T. F. Chan, J. Demmel, J. Donato, J. Dongarra, V. Eijkhout, R. Pozo, C. Romine, and H. van der Vorst	978-0-898713-28-2	1993	OT43	\$41.00	\$28.70
<i>Introduction to Matrix Analysis, Second Edition</i> Richard Bellman	978-0-898713-99-2	1997	CL19	\$58.00	\$40.60
<i>Nonnegative Matrices in the Mathematical Sciences</i> Abraham Berman and Robert J. Plemmons	978-0-89871-321-3	1994	CL09	\$51.50	\$36.05
<i>Perturbation Bounds for Matrix Eigenvalues</i> Rajendra Bhatia	978-0-898716-31-3	2007	CL53	\$51.00	\$35.70
<i>ScaLAPACK Users’ Guide</i> [#] L. S. Blackford, J. Choi, A. Cleary, E. D’Azevedo, J. Demmel, I. Dhillon, J. Dongarra, S. Hammarling, G. Henry, A. Petitet, K. Stanley, D. Walker, and R. C. Whaley	978-0-898713-97-8	1997	SE04	\$85.00	\$59.50
<i>Spectral Properties of Banded Toeplitz Matrices</i> [#] Albrecht Böttcher and Sergei Grudsky	978-0-898715-99-6	2005	OT96	\$102.50	\$71.75
<i>Generalized Inverses of Linear Transformations</i> Stephen L. Campbell and Carl D. Meyer	978-0-898716-71-9	2008	CL56	\$70.00	\$49.00
<i>An Introduction to Iterative Toeplitz Solvers</i> [#] Raymond Hon-Fu Chan and Xiao-Qing Jin	978-0-898716-36-8	2007	FA05	\$69.00	\$48.30
<i>Lanczos Algorithms for Large Symmetric Eigenvalue Computations, Volume I: Theory</i> [#] Jane K. Cullum and Ralph A. Willoughby	978-0-898715-23-1	2002	CL41	\$55.50	\$38.85
<i>Numerical Linear Algebra and Applications, Second Edition</i> Biswa Nath Datta	978-0-898716-85-6	2010	OT116	\$79.00	\$55.30
<i>Applied Numerical Linear Algebra</i> James W. Demmel	978-0-898713-89-3	1997	OT56	\$77.50	\$54.25
<i>LINPACK Users’ Guide</i> J. J. Dongarra, J. R. Bunch, C. B. Moler, and G. W. Stewart	978-0-898711-72-1	1979	OT08	\$67.50	\$47.25
<i>Numerical Linear Algebra for High-Performance Computers</i> [#] Jack J. Dongarra, Iain S. Duff, Danny C. Sorensen, and Henk A. van der Vorst	978-0-898714-28-9	1998	SE07	\$63.00	\$44.10
<i>Matrix Polynomials</i> I. Gohberg, P. Lancaster, and L. Rodman	978-0-898716-81-8	2009	CL58	\$92.00	\$64.40
<i>Invariant Subspaces of Matrices with Applications</i> Israel Gohberg, Peter Lancaster, and Leiba Rodman	978-0-898716-08-5	2006	CL51	\$122.00	\$85.40

LINEAR ALGEBRA—MATERIALS SCIENCE—MATHEMATICAL PHYSICS—NONLINEAR WAVES—NUMERICAL ANALYSIS

TITLE/AUTHOR	ISBN	PUB YEAR	ORDER CODE	LIST PRICE	MEMBER PRICE
<i>Functions of Matrices: Theory and Computation</i> Nicholas J. Higham	978-0-898716-46-7	2008	OT104	\$61.50	\$43.05
<i>Numerical Matrix Analysis: Linear Systems and Least Squares</i> Ilse C. F. Ipsen	978-0-898716-76-4	2009	OT113	\$59.00	\$41.30
<i>Fast Reliable Algorithms for Matrices with Structure</i> # T. Kailath and A. H. Sayed, Editors	978-0-898714-31-9	1999	OT67	\$94.00	\$65.80
<i>The Lanczos Method: Evolution and Application</i> Louis Komzsik	978-0-898715-37-8	2003	SE15	\$55.50	\$38.85
<i>Matrix Analysis for Scientists and Engineers</i> Alan J. Laub	978-0-898715-76-7	2004	OT91	\$44.00	\$30.80
<i>The Lanczos and Conjugate Gradient Algorithms: From Theory to Finite Precision Computations</i> G�rard Meurant	978-0-898716-16-0	2006	SE19	\$112.50	\$78.75
<i>Matrix Analysis and Applied Linear Algebra</i> Carl D. Meyer	978-0-898714-54-8	2000	OT71	\$100.00	\$70.00
<i>Iterative Methods for Sparse Linear Systems, Second Edition</i> Yousef Saad	978-0-898715-34-7	2003	OT82	\$110.00	\$77.00
<i>Numerical Methods for Large Eigenvalue Problems, Revised Edition</i> Yousef Saad	978-1-611970-72-2	2011	CL66	\$70.00	\$49.00
<i>Matrix Algorithms, Volume I: Basic Decompositions</i> G. W. Stewart	978-0-898714-14-2	1998	OT60	\$65.00	\$45.50
<i>Matrix Algorithms, Volume II: Eigensystems</i> G. W. Stewart	978-0-898715-03-3	2001	OT77	\$70.00	\$49.00
<i>Introduction to Linear Algebra, Fourth Edition</i> Gilbert Strang	978-0-980232-71-4	2009	WC09	\$87.50	\$61.25
<i>Numerical Linear Algebra</i> Lloyd N. Trefethen and David Bau III	978-0-898713-61-9	1997	OT50	\$63.00	\$44.10
<i>The Total Least Squares Problem</i> # Sabine Van Huffel and Joos Vandewalle	978-0-898712-75-9	1991	FR09	\$64.50	\$45.15
<i>The Matrix Eigenvalue Problem: GR and Krylov Subspace Methods</i> David S. Watkins	978-0-898716-41-2	2007	OT101	\$102.00	\$71.40

MATERIALS SCIENCE

<i>Smart Material Systems: Model Development</i> * Ralph C. Smith	978-0-898715-83-5	2005	FR32	\$70.00	\$49.00
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MATHEMATICAL PHYSICS

<i>Lectures on Geometric Methods in Mathematical Physics</i> Jerrold E. Marsden	978-0-898711-70-7	1981	CB37	\$46.00	\$32.20
<i>Mathematics Applied to Continuum Mechanics</i> Lee A. Segel with G. H. Handelman	978-0-898716-20-7	2007	CL52	\$87.50	\$61.25
<i>Continuum Modeling in the Physical Sciences</i> E. van Groesen and Jaap Molenaar	978-0-898716-25-2	2007	MM13	\$67.00	\$46.90
<i>Contemporary Problems in Statistical Physics</i> George H. Weiss, Editor	978-0-898713-23-7	1994	OT41	\$88.50	\$61.95

NONLINEAR WAVES

<i>Nonlinear Waves in Integrable and Nonintegrable Systems</i> Jianke Yang	978-0-898717-05-1	2010	MM16	\$85.00	\$59.50
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NUMERICAL ANALYSIS

<i>Computational Methods for Option Pricing</i> Yves Achdou and Olivier Pironneau	978-0-898715-73-6	2005	FR30	\$86.50	\$60.55
<i>Introduction to Numerical Continuation Methods</i> Eugene L. Allgower and Kurt Georg	978-0-898715-44-6	2003	CL45	\$72.00	\$50.40
<i>The Numerical Solution of Elliptic Equations</i> Garrett Birkhoff	978-0-898710-01-4	1972	CB01	\$38.00	\$26.60
<i>Numerical Solution of Elliptic Problems</i> Garrett Birkhoff and Robert E. Lynch	978-0-898714-76-0	1984	AM06	\$82.00	\$57.40
<i>The SIAM 100-Digit Challenge: A Study in High-Accuracy Numerical Computing</i> # Folkmar Bornemann, Dirk Laurie, Stan Wagon, and J�rg Waldvogel	978-0-898715-61-3	2004	OT86	\$67.50	\$47.25
<i>Spectral Approximation of Linear Operators</i> Fran�oise Chatelin	978-0-898719-99-4	2011	CL65	\$75.00	\$52.50
<i>The Finite Element Method for Elliptic Problems</i> # Phillippe G. Ciarlet	978-0-898715-14-9	2002	CL40	\$69.50	\$48.65

NUMERICAL ANALYSIS—OPTICS—OPTIMIZATION THEORY & MATHEMATICAL PROGRAMMING

TITLE/AUTHOR	ISBN	PUB YEAR	ORDER CODE	LIST PRICE	MEMBER PRICE
<i>Numerical Methods in Scientific Computing, Volume 1</i> Germund Dahlquist and Åke Björck	978-0-898716-44-3	2008	OT103	\$112.50	\$78.75
<i>Polynomial Based Iteration Methods for Symmetric Linear Systems</i> Bernd Fischer	978-1-611971-91-0	2011	CL68	\$85.00	\$59.50
<i>Numerical Analysis of Spectral Methods: Theory and Applications</i> David Gottlieb and Steven A. Orszag	978-0-89871-023-6	1977	CB26	\$56.50	\$39.55
<i>Iterative Methods for Solving Linear Systems</i> Anne Greenbaum	978-0-898713-96-1	1997	FR17	\$72.00	\$50.40
<i>Discrete Inverse Problems: Insight and Algorithms</i> Per Christian Hansen	978-0-898716-96-2	2010	FA07	\$65.00	\$45.50
<i>Accuracy and Stability of Numerical Algorithms, Second Edition</i> Nicholas J. Higham	978-0-898715-21-7	2002	OT80	\$80.00	\$56.00
<i>Numerical Solution of Two Point Boundary Value Problems</i> Herbert B. Keller	978-0-898710-21-2	1976	CB24	\$38.00	\$26.60
<i>Linear Differential Operators</i> # Cornelius Lanczos	978-0-898713-70-1	1996	CL18	\$84.00	\$58.80
<i>Finite Difference Methods for Ordinary and Partial Differential Equations: Steady-State and Time-Dependent Problems</i> Randall J. LeVeque	978-0-898716-29-0	2007	OT98	\$65.00	\$45.50
<i>Analytical and Numerical Methods for Volterra Equations</i> # Peter Linz	978-0-898711-98-1	1985	AM07	\$80.50	\$56.35
<i>Sinc Methods for Quadrature and Differential Equations</i> John Lund and Kenneth L. Bowers	978-0-898712-98-8	1992	OT32	\$88.50	\$61.95
<i>Numerical Analysis: A Second Course</i> James M. Ortega	978-0-898712-50-6	1990	CL03	\$59.00	\$41.30
<i>Iterative Solution of Nonlinear Equations in Several Variables</i> James M. Ortega and Werner C. Rheinboldt	978-0-898714-61-6	2000	CL30	\$79.00	\$55.30
<i>Solution of Partial Differential Equations on Vector and Parallel Computers</i> James M. Ortega and Robert G. Voigt	978-0-898710-55-7	1985	OT13	\$39.00	\$27.30
<i>The Symmetric Eigenvalue Problem</i> # Beresford N. Parlett	978-0-898714-02-9	1998	CL20	\$81.00	\$56.70
<i>Discontinuous Galerkin Methods for Solving Elliptic and Parabolic Equations: Theory and Implementation</i> Béatrice Rivière	978-0-898716-56-6	2008	FR35	\$57.00	\$39.90
<i>Afternotes Goes to Graduate School: Lectures on Advanced Numerical Analysis</i> G. W. Stewart	978-0-898714-04-3	1998	OT58	\$59.50	\$41.65
<i>Afternotes on Numerical Analysis</i> G. W. Stewart	978-0-89871-362-6	1996	OT49	\$54.50	\$38.15
<i>An Analysis of the Finite Element Method, Second Edition</i> Gilbert Strang and George Fix	978-0-980232-70-7	2008	WC08	\$80.00	\$56.00
<i>Finite Difference Schemes and Partial Differential Equations, Second Edition</i> John C. Strikwerda	978-0-898716-39-9	2004	OT88	\$116.00	\$81.20
<i>Functional Analysis and Approximation Theory in Numerical Analysis</i> Richard S. Varga	978-0-898710-03-8	1971	CB03	\$35.50	\$24.85
<i>Scientific Computation on Mathematical Problems and Conjectures</i> Richard S. Varga	978-0-898712-57-5	1990	CB60	\$51.00	\$35.70
<i>Fourier Analysis of Numerical Approximations of Hyperbolic Equations</i> R. Vichnevetsky and J. B. Bowles	978-0-89871-392-3	1982	AM05	\$64.50	\$45.15
<i>Variational Methods for Eigenvalue Approximation</i> H. F. Weinberger	978-0-898710-12-0	1974	CB15	\$56.50	\$39.55

OPTICS

<i>Mathematical Modeling in Optical Science</i> # Gang Bao, Lawrence Cowsar, and Wen Masters, Editors	978-0-898714-75-3	2001	FR22	\$105.50	\$73.85
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OPTIMIZATION THEORY and MATHEMATICAL PROGRAMMING

<i>Variational Analysis in Sobolev and BV Spaces</i> Hedy Attouch, Giuseppe Buttazzo, and Gérard Michaille	978-0-898716-00-9	2005	MP06	\$151.50	\$106.05
<i>Generalized Concavity</i> Mordecai Avriel, Walter E. Diewert, Siegfried Schaible, and Israel Zang	978-0-898718-96-6	2010	CL63	\$75.00	\$52.50
<i>Lectures on Modern Convex Optimization: Analysis, Algorithms, and Engineering Applications</i> Aharon Ben-Tal and Arkadi Nemirovski	978-0-898714-91-3	2001	MP02	\$131.50	\$92.05
<i>Nonlinear Programming: Concepts, Algorithms, and Applications to Chemical Processes</i> Lorenz T. Biegler	978-0-898717-02-0	2010	MP10	\$85.00	\$59.50

OPTIMIZATION THEORY and MATHEMATICAL PROGRAMMING—ORDINARY DIFFERENTIAL EQUATIONS

TITLE/AUTHOR	ISBN	PUB YEAR	ORDER CODE	LIST PRICE	MEMBER PRICE
<i>Real-Time PDE-Constrained Optimization</i> Lorenz T. Biegler, Omar Ghattas, Matthias Heinkenschloss, David E. Keyes, and Bart van Bloemen Waanders, Editors	978-0-898716-21-4	2007	CS03	\$102.00	\$71.40
<i>Introduction to Derivative-Free Optimization</i> Andrew R. Conn, Katya Scheinberg, and Luis N. Vicente	978-0-898716-68-9	2009	MP08	\$75.00	\$52.50
<i>Trust-Region Methods</i> # Andrew R. Conn, Nicholas I. M. Gould, and Philippe L. Toint	978-0-898714-60-9	2000	MP01	\$158.50	\$110.95
<i>The Linear Complementarity Problem</i> Richard W. Cottle, Jong-Shi Pang, and Richard E. Stone	978-2-898716-86-3	2009	CL60	\$92.00	\$64.40
<i>Numerical Methods for Unconstrained Optimization and Nonlinear Equations</i> # J. E. Dennis, Jr. and Robert B. Schnabel	978-0-898713-64-0	1996	CL16	\$63.00	\$44.10
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<i>Nonlinear Programming: Sequential Unconstrained Minimization Techniques</i> # Anthony V. Fiacco and Garth P. McCormick	978-0-898712-54-4	1990	CL04	\$60.50	\$42.35
<i>Methods of Mathematical Economics</i> Joel N. Franklin	978-0-898715-09-5	2002	CL37	\$55.50	\$38.85
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<i>Linear and Nonlinear Optimization, Second Edition</i> Igor Griva, Stephen G. Nash, and Ariela Sofer	978-0-898716-61-0	2008	OT108	\$98.00	\$68.60
<i>The Sharpest Cut: The Impact of Manfred Padberg and His Work</i> Martin Grötschel, Editor	978-0-898715-52-1	2004	MP04	\$115.00	\$80.50
<i>Lagrange Multiplier Approach to Variational Problems and Applications</i> Kazufumi Ito and Karl Kunisch	978-0-898716-49-8	2008	DC15	\$102.00	\$71.40
<i>Integer Programming: Facets, Subadditivity, and Duality for Group and Semi-group Problems</i> Ellis L. Johnson	978-0-898711-62-2	1980	CB32	\$38.00	\$26.60
<i>Implicit Filtering</i> C. T. Kelley	978-1-611971-89-7	2011	SE23	Check Web site	
<i>Iterative Methods for Linear and Nonlinear Equations</i> C. T. Kelley	978-0-898713-52-7	1995	FR16	\$59.50	\$41.65
<i>Iterative Methods for Optimization</i> C. T. Kelley	978-0-898714-33-3	1999	FR18	\$63.00	\$44.10
<i>The Basics of Practical Optimization</i> Adam Levy	978-0-898716-79-5	2009	OT114	\$67.00	\$46.90
<i>Nonlinear Programming</i> # Olvi L. Mangasarian	978-0-898713-41-1	1994	CL10	\$56.50	\$39.55
<i>Optimization Software Guide</i> # Jorge J. Moré and Stephen J. Wright	978-0-898713-22-0	1993	FR14	\$53.00	\$37.10
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<i>Conjugate Duality and Optimization</i> R. Tyrrell Rockafellar	978-0-898710-13-7	1974	CB16	\$38.50	\$26.95
<i>Facts, Conjectures, and Improvements for Simulated Annealing</i> Peter Salamon, Paolo Sibani, and Richard Frost	978-0-898715-08-8	2002	MM07	\$59.00	\$41.30
<i>Lectures on Stochastic Programming: Modeling and Theory</i> Alexander Shapiro, Darinka Dentcheva, and Andrzej Ruszczyński	978-0-898716-87-0	2009	MP09	\$119.00	\$83.30
<i>Inverse Problem Theory and Methods for Model Parameter Estimation</i> Albert Tarantola	978-0-898715-72-9	2004	OT89	\$98.50	\$68.95
<i>Semismooth Newton Methods for Variational Inequalities and Constrained Optimization Problems in Function Spaces</i> Michael Ulbrich	978-1-611970-68-5	2011	MO11	\$99.00	\$69.30
<i>Applications of Stochastic Programming</i> Stein W. Wallace and William T. Ziemba, Editors	978-0-898715-55-2	2005	MP05	\$153.50	\$107.45
<i>Primal-Dual Interior-Point Methods</i> Stephen J. Wright	978-0-898713-82-4	1997	OT54	\$66.50	\$46.55
ORDINARY DIFFERENTIAL EQUATIONS					
<i>Numerical Solution of Boundary Value Problems for Ordinary Differential Equations</i> Uri M. Ascher, Robert M. M. Mattheij, and Robert D. Russell	978-0-898713-54-1	1995	CL13	\$70.00	\$49.00
<i>A Survey of Lie Groups and Lie Algebras with Applications and Computational Methods</i> Johan G. F. Belinfante and Bernard Kolman	978-0-898712-43-8	1989	CL02	\$60.50	\$42.35
<i>Ordinary Differential Equations</i> # George F. Carrier and Carl E. Pearson	978-0-898712-65-0	1991	CL06	\$59.00	\$41.30

ORDINARY DIFFERENTIAL EQUATIONS—PARTIAL DIFFERENTIAL EQUATIONS—PROBABILITY

TITLE/AUTHOR	ISBN	PUB YEAR	ORDER CODE	LIST PRICE	MEMBER PRICE
<i>Linear Ordinary Differential Equations</i> Earl A. Coddington and Robert Carlson	978-0-898713-88-6	1997	OT57	\$94.00	\$65.80
<i>The Method of Equivalence and Its Applications</i> Robert B. Gardner	978-0-898712-40-7	1989	CB58	\$55.50	\$38.85
<i>Ordinary Differential Equations, Second Edition</i> Philip Hartman	978-0-898715-10-1	2002	CL38	\$75.00	\$52.50
<i>Ordinary Differential Equations in Theory and Practice</i> Robert Mattheij and Jaap Molenaar	978-0-898715-31-6	2002	CL43	\$59.00	\$41.30
<i>Differential Dynamical Systems</i> James D. Meiss	978-0-898716-35-1	2007	MM14	\$81.50	\$57.05
<i>Nonholonomic Motion of Rigid Mechanical Systems from a DAE Viewpoint</i> Patrick J. Rabier and Werner C. Rheinboldt	978-0-898714-46-3	2000	OT68	\$52.00	\$36.40
<i>Branching in the Presence of Symmetry</i> David H. Sattinger	978-0-898711-82-0	1983	CB40	\$42.50	\$29.75

PARTIAL DIFFERENTIAL EQUATIONS

<i>Lie-Backlund Transformation in Applications</i> Robert L. Anderson and Nail H. Ibragimov	978-0-898711-51-6	1979	AM01	\$55.50	\$38.85
<i>Finite Element Solution of Boundary Value Problems: Theory and Computation</i> # Owe Axelsson and Vincent A. Barker	978-0-898714-99-9	2001	CL35	\$70.00	\$49.00
<i>PLTMG: A Software Package for Solving Elliptic Partial Differential Equations: Users' Guide 8.0</i> Randolph E. Bank	978-0-898714-09-8	1998	SE05	\$55.50	\$38.85
<i>An Introduction to Invariant Imbedding</i> Richard Bellman and G. M. Wing	978-0-898713-04-6	1992	CL08	\$56.50	\$39.55
<i>The Linear Sampling Method in Inverse Electromagnetic Scattering</i> Fioralba Cakoni, David Colton, and Peter Monk	978-0-898719-39-0	2011	CB80	\$55.00	\$38.50
<i>An Introduction to Inverse Scattering and Inverse Spectral Problems</i> # Khosrow Chadan, David Colton, Lassi Päiväranta, and William Rundell	978-0-898713-87-9	1997	MM02	\$70.00	\$49.00
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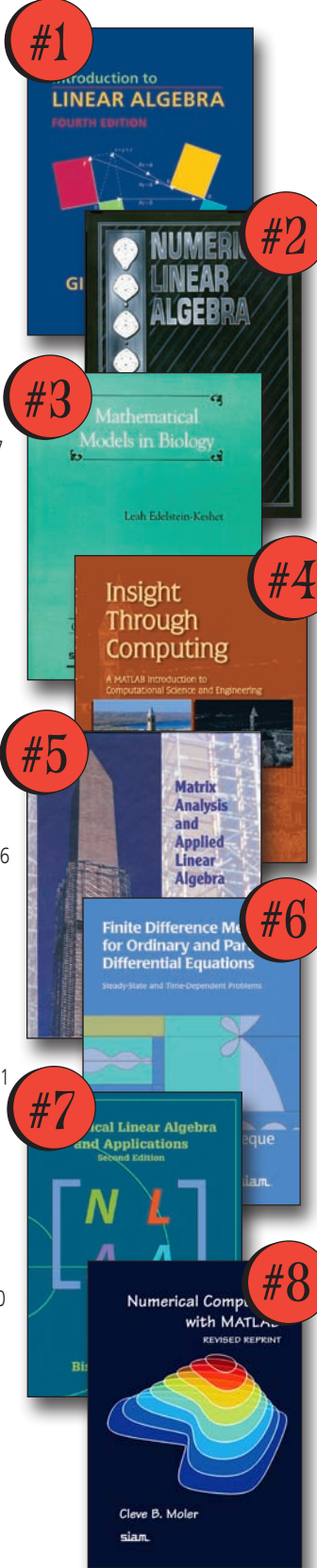
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