

Reference and Book List

The *Reference* section of the Notices is intended to provide the reader with frequently sought information in an easily accessible manner. New information is printed as it becomes available and is referenced after the first printing. As soon as information is updated or otherwise changed, it will be noted in this section.

Contacting the Notices

The preferred method for contacting the *Notices* is electronic mail. The editor is the person to whom to send articles and letters for consideration. Articles include feature articles, memorial articles, communications, opinion pieces, and book reviews. The editor is also the person to whom to send news of unusual interest about other people's mathematics research.

The managing editor is the person to whom to send items for "Mathematics People", "Mathematics Opportunities", "For Your Information", "Reference and Book List", and "Mathematics Calendar". Requests for permissions, as well as all other inquiries, go to the managing editor.

The electronic-mail addresses are `notices@math.ou.edu` in the case of the editor and `notices@ams.org` in the case of the managing editor. The fax numbers are 405-325-7484 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

September 9, 2008: Full proposals for NSF International Research Fellow Awards. Contact the program officer, Susan Parris, 703-292-8711, `sparris@nsf.gov`; or visit the website http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5179&org=NSF.

September 15, 2008: Nominations for Sloan Research Fellowships. See http://www.sloan.org/programs/fellowship_brochure.shtml or contact Sloan Research Fellowships, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, New York 10111-0242.

September 19, 2008: Full proposals for NSF Focused Research Groups. See http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5671&org=DMS.

September 30, 2008: Applications for spring 2009 semester of Math in Moscow. See <http://www.mccme.ru/mathinmoscow> or write to: Math in Moscow, P.O. Box 524, Wynnwood, PA 19096; fax: +7095-291-65-01; email: `mim@mccme.ru`. For information on AMS scholarships see <http://www.ams.org/outreach/mimoscow.html> or write to: Math in Moscow Program, Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904-2294; email: `student-serv@ams.org`.

September 30, 2008: Nominations for 2008 Information-Based Complexity Young Researcher Award.

Contact Joseph Traub at `traub@cs.columbia.edu`.

October 1, 2008: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone: 703-934-0163; email: `awm@awm-math.edu`; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

October 15, 2008: Applications for NSF Mathematical Sciences Postdoctoral Research Fellowships. See http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5301&org=DMS.

October 15, 2008: Proposals for NSA Mathematical Sciences Program research grants. See <http://www.nsa.gov/msp/index.cfm> or contact the program director, Michelle Wagner (`mdwagn4@nsa.gov`), or the program administrator, Barbara Johnson (`ba-`

Where to Find It

A brief index to information that appears in this and previous issues of the *Notices*.

AMS Bylaws—November 2007, p. 1366

AMS Email Addresses—February 2008, p. 274

AMS Ethical Guidelines—June/July 2006, p. 701

AMS Officers 2006 and 2007 Updates—May 2008, p. 629

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NRC Mathematical Sciences Education Board—April 2008, p. 515

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Program Officers for Federal Funding Agencies—October 2008, p. 1116 (DoD, DoE); December 2007, p. 1359 (NSF); December 2007, p. 1526 (NSF Mathematics Education)

Program Officers for NSF Division of Mathematical Sciences—November 2007, p. 1358

Stipends for Study and Travel—September 2008, p. 983

john1@nsa.gov), telephone 301-688-0400.

October 15, 2008: Proposals for NSF Postdoctoral Research Fellowships. See http://www.nsf.gov/funding/pgm_summ.jsp?pins_id=5301&org=DMS.

November 1, 2008: Applications for November review for the National Academies Postdoctoral and Senior Research Associateship Programs. See <http://www7.nationalacademies.org/rap/index.html> or contact Research Associateship Programs, National Research Council, Keck 568, 500 Fifth Street, NW, Washington, DC 20001; telephone 202-334-2760; fax 202-334-2759; email: rap@nas.edu.

November 15, 2008: Target date for receipt of applications for NSA Mathematics Sabbatical Program. See <http://www.nsa.gov/msp/index.cfm> or contact the program director, Michelle Wagner (mdwagn4@nsa.gov), or the program administrator, Barbara Johnson (bajohn1@nsa.gov), telephone 301-688-0400.

December 1, 2008: Applications for AMS Centennial Fellowships. See <http://www.ams.org/employment/centflyer.html>; write to the Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294; send email to prof-serv@ams.org; or call 401-455-4060.

January 15, 2009: Applications for AMS-AAAS Mass Media Summer Fellowships. See “Mathematics Opportunities” in this issue.

December 15, 2008: Applications for AMS Epsilon Fund grants. See “Mathematics Opportunities” in this issue.

February 1, 2009: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone: 703-934-0163; email: awm@awm-math.edu. The postal address is: Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

February 27, 2009: Submissions for Association for Women in Mathematics (AWM) essay contest. See “Mathematics Opportunities” in this issue.

April 15, 2009: Applications for fall 2009 semester of Math in Moscow. See <http://www.mccme.ru/>

mathinmoscow or write to: Math in Moscow, P.O. Box 524, Wynnewood, PA 19096; fax: +7095-291-65-01; email: mim@mccme.ru. For information on AMS scholarships see <http://www.ams.org/outreach/mimoscw.html> or write to: Math in Moscow Program, Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904-2294; email: student-serv@ams.org.

May 8, 2009: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone: 703-934-0163; email: awm@awm-math.edu. The postal address is: Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

June 2, 2009: Proposals for NSF’s Enhancing the Mathematical Sciences Workforce in the Twenty-First Century program. See “Mathematics Opportunities” in this issue.

October 1, 2009: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone: 703-934-0163; email: awm@awm-math.edu. The postal address is: Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

DoD Mathematics Staff

The following agencies of the Department of Defense and the Department of Energy fund research in the mathematical sciences. The names, addresses, and telephone numbers of the pertinent staff members are listed.

Defense Advanced Research Projects Agency

Defense Sciences Office
3701 North Fairfax Drive
Arlington, VA 22203-1714
703-526-6630
<http://www.darpa.mil/dso>

Applied and Computational Mathematics Program

Discovery and Exploitation of Structure in Algorithms

Dennis Healy, Program Manager
571-218-4330
dennis.healy@darpa.mil

Geospatial Representation and Analysis

Todd Hughes, Program Manager

Predicting Real Optimized Materials

Judah Goldwasser, Program Manager
571-218-4293
judah.goldwasser@darpa.mil

Robust Uncertainty Management

Cindy Daniell, Program Manager
571-218-4504
cynthia.daniell@darpa.mil

Fundamental Mathematics Program

Benjamin Mann, Program Manager
571-218-4246
benjamin.mann@darpa.mil

Air Force Office of Scientific Research

Directorate of Mathematics, Information, and Life Sciences
AFOSR/NM
875 North Randolph Street, Suite 325
Arlington, VA 22203-1768
Fax: 703-696-8450
<http://www.afosr.af.mil/>

Complex Networks

Robert Bonneau
703-696-9545
robert.bonneau@afosr.af.mil

Computational Mathematics

Fariba Fahroo
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fariba.fahroo@afosr.af.mil

Distributed Intelligence and Information Fusion

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Dynamics and Control

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Electromagnetics

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Information Operations and Security
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Mathematical Modeling of Cognition and Decision
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Optimization and Discrete Mathematics
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Physical Mathematics and Applied Analysis
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Willard Larkin
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Systems and Software
David Luginbuhl
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Sensing, Surveillance, and Navigation
Jon Sjogren
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Software and Systems
Robert Herklotz
703-696-6565
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Army Research Office
Mathematical and Information Sciences Directorate
ATTN: AMSRD-ARL-RO-M
P.O. Box 12211
Research Triangle Park, NC 27709
919-549-4368
Fax: 919-549-4248
<http://www.arl.army.mil/www/default.cfm?Action=29&Page=216>

Randy Zachery, Acting Director
919-549-4368
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Program in Mathematics

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joseph.michael.coyle@arl.army.mil

Cooperative Systems
David (Chris) Arney, Division Chief
919-549-4254
david.arney1@arl.army.mil

Discrete Mathematics and Computer Science
Joseph M. Coyle, Program Manager
919-549-4256
joseph.michael.coyle@arl.army.mil

Modeling of Complex Systems
Elmor Peterson, Program Manager
919-549-4253
elmor.peterson@arl.army.mil

Stochastic Analysis, Applied Probability, and Statistics
Mou-Hsiung (Harry) Chang, Program Manager
919-549-4229
mouhsiung.chang@arl.army.mil

Program in Computing and Information Sciences

Information and Signal Processing
Liyi Dai, Program Manager
919-549-4350
liyi.dai@arl.army.mil

Information and Software Assurance
Cliff Wang, Program Manager
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Mobile, Wireless Communications and Networks
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robert.ulman@arl.army.mil

Software and Intelligent Systems
Cliff Wang, Program Manager
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Systems and Control
Randy Zachery, Division Chief
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National Security Agency
Mathematical Sciences Program
Attn: R1, Suite 6557
Ft. George G. Meade, MD 20755-6557
<http://www.nsa.gov/msp/>

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Office of Naval Research
Mathematics, Computer, and Information Research
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875 North Randolph Street, Suite 1425
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703-696-3191
311_contact@onr.navy.mil

Autonomous Systems
703-696-5754
311_AS@onr.navy.mil

Computational Analysis
703-696-0195
311_AA@onr.navy.mil

Command and Control
703-696-4961
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Intelligent Systems
703-696-5754
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Operations Research
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Probability and Statistics
703-696-4320
311_PS@onr.navy.mil

Signal and Image Processing
703-588-2439
311_SIP@onr.navy.mil

Software and Computer Systems
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Target Tracking and Sensor Fusion
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DoE Mathematics Program

Office of Advanced Scientific Computing Research
Office of Science
U.S. Department of Energy
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Energy Sciences Network (ESnet)
Vince Dattoria, Program Manager
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Scientific Discovery through Advanced Computing
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Book ListList

The Book List highlights books that have mathematical themes and are aimed at a broad audience potentially including mathematicians, students,

and the general public. When a book has been reviewed in the Notices, a reference is given to the review. Generally the list will contain only books published within the last two years, though exceptions may be made in cases where current events (e.g., the death of a prominent mathematician, coverage of a certain piece of mathematics in the news) warrant drawing readers' attention to older books. Suggestions for books to include on the list may be sent to notices-booklist@ams.org.

*Added to "Book List" since the list's last appearance.

**An Abundance of Katherines*, by John Green. Dutton Juvenile Books, September 2006. ISBN-13:978-0-5254-7688-7. (Reviewed in this issue.)

**Amongst Mathematicians: Teaching and Learning Mathematics at University Level*, by Elena Nardi. Springer, November 2007. ISBN-13: 978-0-387-37141-2.

**The Archimedes Codex*, by Reviel Netz and William Noel. Weidenfeld and Nicolson, May 2007. ISBN-13: 978-0-29764-547-4. (Reviewed September 2008.)

**Benjamin Franklin's Numbers: An Unsung Mathematical Odyssey*, by Paul C. Pasles. Princeton University Press, October 2007. ISBN-13: 978-0-6911-2956-3.

**The Book of Numbers: The Secret of Numbers and How They Changed the World*, by Peter J. Bentley. Firefly Books, February 2008. ISBN-13: 978-15540-736-10.

**The Calculus Wars: Newton, Leibniz, and the Greatest Mathematical Clash of All Time*, by Jason Socrates Bardi. Thunder's Mouth Press, April 2007. ISBN-13: 978-1-5602-5992-3.

**A Certain Ambiguity: A Mathematical Novel*, by Gaurav Suri and Hartosh Singh Bal. Princeton University Press, June 2007. ISBN-13: 978-0-6911-2709-5. (Reviewed February 2008.)

**Descartes: A Biography*, by Desmond Clarke. Cambridge University Press, March 2006. ISBN 0-521-82301-3. (Reviewed January 2008.)

**Digital Dice*, by Paul J. Nahin. Princeton University Press, March 2008. ISBN-13: 978-06911-269-82.

**Dimensions*, by Jos Leys, Etienne Ghys, and Aurélien Alvarez. DVD, 117

minutes. Available at <http://www.dimensions-math.org>.

**Discovering Patterns in Mathematics and Poetry*, by Marcia Birken and Anne C. Coon. Rodopi, February 2008. ISBN-13: 978-9-0420-2370-3.

**Does Measurement Measure Up?: How Numbers Reveal and Conceal the Truth*, by John Henshaw. Johns Hopkins University Press, March 2006. ISBN-13: 978-0-8018-8375-0.

**Euclidean and Non-Euclidean Geometries: Development and History*, fourth revised and expanded edition, by Marvin Jay Greenberg. W. H. Freeman, September 2007. ISBN-13: 978-0-7167-9948-1.

**Flatland—The Movie: A Journey of Many Dimensions*. Flatworld Productions, 2007. Special Educator Edition DVD, <http://store.flatlandthemovie.com>. (Reviewed November 2007.)

**Fly Me to the Moon: An Insider's Guide to the New Science of Space Travel*, by Edward Belbruno. Princeton University Press, January 2007. ISBN-13: 978-0-6911-2822-1. (Reviewed April 2008.)

**Geekspeak: How Life + Mathematics = Happiness*, by Graham Tattersall. Collins, September 2008. ISBN-13: 978-00616-292-42.

**Geometric Folding Algorithms: Linkages, Origami, Polyhedra*, by Erik D. Demaine and Joseph O'Rourke. Cambridge University Press, July 2007. ISBN-13: 978-05218-57574.

**The Golden Section: Nature's Greatest Secret (Wooden Books)*, by Scott Olsen. Walker and Company, October 2006. ISBN-13: 978-08027-153-95.

**Group Theory in the Bedroom, and Other Mathematical Diversions*, by Brian Hayes. Hill and Wang, April 2008. ISBN-13: 978-0-8090-5219-6.

**Guesstimation: Solving the World's Problems on the Back of a Cocktail Napkin*, by Lawrence Weinstein and John A. Adam. Princeton University Press, April 2008. ISBN-13: 978-0-6911-2949-5.

**A History of Abstract Algebra*, by Israel Kleiner. Birkhäuser, October 2007. ISBN-13: 978-0-8176-4684-4.

**How Mathematicians Think: Using Ambiguity, Contradiction, and Paradox to Create Mathematics*, by William Byers. Princeton University Press, May

2007. ISBN-13: 978-0-6911-2738-5. (Reviewed December 2007.)

How Round Is Your Circle, by John Bryant and Chris Sangwin. Princeton University Press, January 2008. ISBN-13: 978-0-6911-3118-4.

Impossible?: Surprising Solutions to Counterintuitive Conundrums, by Julian Havil. Princeton University Press, April 2008. ISBN-13: 978-0-6911-3131-3.

The Indian Clerk, by David Leavitt. Bloomsbury USA, September 2007. ISBN-13: 978-15969-1040-9. (Reviewed September 2008.)

An Introduction to Gödel's Theorems, by Peter Smith. Cambridge University Press, August 2007. ISBN-13: 978-0-521-67453-9.

Irreligion: A Mathematician Explains Why the Arguments for God Just Don't Add Up, by John Allen Paulos. Hill and Wang, December 2007. ISBN-13: 978-0-8090-591-95. (Reviewed August 2008.)

Karl Pearson: The Scientific Life in a Statistical Age, by Theodore M. Porter. Princeton University Press, (new edition) December 2005. ISBN-13: 978-0-6911-2635-7. (Reviewed December 2007.)

The Legacy of Mario Pieri in Geometry and Arithmetic, by Elena Anne Marchisotto and James T. Smith. Birkhäuser, May 2007. ISBN-13: 978-0-8176-3210-6.

Leonhard Euler, a Man to Be Reckoned With, by Andreas K. Heyne and Alice K. Heyne. Birkhäuser, 2007. ISBN-13: 978-3-7643-8332-9. (Reviewed March 2008.)

Logic's Lost Genius: The Life of Gerhard Gentzen, by Eckart Menzler-Trott, Craig Smorynski (translator), Edward R. Griffor (translator). AMS-LMS, November 2007. ISBN-13: 978-0-8218-3550-0.

Making Mathematics Work with Needlework: Ten Papers and Ten Projects, edited by Sarah-Marie Belcastro and Carolyn Yackel. A K Peters, September 2007. ISBN-13: 978-1-5688-1331-8.

Math Doesn't Suck: How to Survive Middle-School Math without Losing Your Mind or Breaking a Nail, by Danica McKellar. Hudson Street Press, August 2007. ISBN-13: 978-1-5946-3039-2.

Mathematical Mind-Benders, by Peter Winkler. A K Peters, August 2007. ISBN-13: 978-1-5688-1336-3.

**Mathematical Omnibus: Thirty Lectures on Classic Mathematics*, by Dmitry Fuchs and Serge Tabachnikov. AMS, October 2007. ISBN-13: 978-08218-431-61.

**Mathematics and Democracy: Designing Better Voting and Fair-Division Procedures*, by Steven J. Brams. Princeton University Press, December 2007. ISBN-13: 978-0691-1332-01.

Mathematics at Berkeley: A History, by Calvin C. Moore. A K Peters, February 2007. ISBN-13: 978-1-5688-1302-8.

The Mathematics of Egypt, Mesopotamia, China, India, and Islam: A Sourcebook, by Victor J. Katz et al. Princeton University Press, July 2007. ISBN-13: 978-0-6911-2745-3.

Measuring the World, by Daniel Kehlmann. Pantheon, November 2006. ISBN 0-375-42446-6. (Reviewed June/July 2008.)

The Millennium Prize Problems, edited by James Carlson, Arthur Jaffe, and Andrew Wiles. AMS, June 2006. ISBN-13: 978-0-8218-3679-8.

More Mathematical Astronomy Morsels, by Jean Meeus. Willmann-Bell, 2002. ISBN 0-943396743.

More Sex Is Safer Sex: The Unconventional Wisdom of Economics, by Steven E. Landsburg. Free Press, April 2007. ISBN-13: 978-1-416-53221-7. (Reviewed June/July 2008.)

Mr. Hopkins' Men: Cambridge Reform and British Mathematics in the 19th Century, by Alex D. D. Craik. Springer, February 2007. ISBN-13: 978-1-8480-0132-9.

Number Story: From Counting to Cryptography, by Peter M. Higgins. Springer, February 2008. ISBN-13: 978-1-8480-0000-1

The Numbers behind NUMB3RS: Solving Crime with Mathematics, by Keith Devlin and Gary Lorden. Plume, August 2007. ISBN-13: 978-0-4522-8857-7.

**One to Nine: The Inner Life of Numbers*, by Andrew Hodges. W. W. Norton, May 2008. ISBN-13: 978-03930-664-18.

A Passion for Discovery, by Peter Freund. World Scientific, August 2007. ISBN-13: 978-9-8127-7214-5.

Perfect Figures: The Lore of Numbers and How We Learned to Count, by Bunny Crumpacker. Thomas Dunne Books, August 2007. ISBN-13: 978-0-3123-6005-4.

The Poincaré Conjecture: In Search of the Shape of the Universe, by Donal O'Shea. Walker, March 2007. ISBN-13: 978-0-8027-1532-6. (Reviewed January 2008.)

Poincaré's Prize: The Hundred-Year Quest to Solve One of Math's Greatest Puzzles, by George Szpiro. Dutton Adult, June 2007. ISBN-13: 978-0-525-95024-0. (Reviewed January 2008.)

The Presidential Election Game, by Steven J. Brams. A K Peters, December 2007. ISBN-13: 978-1-5688-1348-6.

**The Princeton Companion of Mathematics*, edited by Timothy Gowers (June Barrow-Green and Imre Leader, associate editors). Princeton University Press, November 2008. ISBN-13: 978-06911-188-02.

The Probability of God: A Simple Calculation That Proves the Ultimate Truth, by Stephen D. Unwin. Three Rivers Press, October 2004. ISBN-13: 978-1-4000-5478-7. (Reviewed February 2008.)

Pursuit of Genius: Flexner, Einstein, and the Early Faculty at the Institute for Advanced Study, by Steve Batterson. A K Peters, June 2006. ISBN 1-56881-259-0. (Reviewed August 2008.)

The Pythagorean Theorem: A 4000-Year History, by Eli Maor. Princeton University Press, May 2007. ISBN-13: 978-0-6911-2526-8.

Random Curves: Journeys of a Mathematician, by Neal Koblitz. Springer, December 2007. ISBN-13: 978-3-5407-4077-3.

**Roots to Research: A Vertical Development of Mathematical Problems*, by Judith D. Sally and Paul J. Sally Jr. AMS, November 2007. ISBN-13: 978-08218-440-38.

Sacred Mathematics: Japanese Temple Geometry, by Fukagawa Hidetoshi and Tony Rothman. Princeton University Press, July 2008. ISBN-13: 978-0-6911-2745-3.

Super Crunchers: Why Thinking-by-Numbers Is the New Way to Be Smart, by Ian Ayres. Bantam, August 2007. ISBN-13: 978-0-5538-0540-6.

Superior Beings: If They Exist, How Would We Know? Game-Theoretic Im-

APPLIED MATH TITLES

from **siam**

Introduction to the Numerical Analysis of Incompressible Viscous Flows

William Layton

2008 · xx + 213 pages · Softcover
ISBN 978-0-898716-57-3 · List Price \$67.00
SIAM Member Price \$46.90 · **CS06**

New!

Discontinuous Galerkin Methods for Solving Elliptic and Parabolic Equations: Theory and Implementation

Béatrice Rivière

2008 · xx + 190 pages · Softcover
ISBN 978-0-89871-56-6 · List Price \$55.00
SIAM Member Price \$38.50 · **FR35**

New!

Lagrange Multiplier Approach to Variational Problems and Applications

Kazufumi Ito and Karl Kunisch

2008 · xviii + 341 pages · Softcover
ISBN 978-0-898716-49-8 · List Price \$99.00
SIAM Member Price \$69.30 · **DC15**

New!

Numerical Methods for Evolutionary Differential Equations

Uri M. Ascher

2008 · xiv + 395 pages · Softcover
ISBN 978-0-898716-52-8 · List Price \$79.00
SIAM Member Price \$55.30 · **CS05**

New!

Boundary Control of PDEs: A Course on Backstepping Designs

Miroslav Krstic and Andrey Smyshlyaev

2008 · x + 192 pages · Hardcover
ISBN 978-0-89871-650-4 · List Price \$89.00
SIAM Member Price \$62.30 · **DC16**

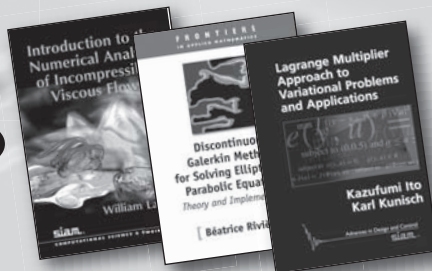
New!

Numerical Methods in Scientific Computing, Volume I

Germund Dahlquist and Åke Björck

2008 · xxviii + 717 pages · Hardcover
ISBN 978-0-898716-44-3 · List Price \$109.00
SIAM Member Price \$76.30 · **OT103**

New!



A Unified Approach to Boundary Value Problems

Athanasios S. Fokas

2008 · xvi + 336 pages · Softcover
ISBN 978-0-898716-51-1 · List Price \$75.00
SIAM Member Price \$52.50 · **CB78**

New!

A First Course in Order Statistics

Barry C. Arnold, N. Balakrishnan, and H. N. Nagaraja

2008 · xxvi + 279 pages · Softcover
ISBN 978-0-89871-648-1 · List Price \$73.00
SIAM Member Price \$51.10 · **CL54**

New!

Functions of Matrices: Theory and Computation

Nicholas J. Higham

2008 · xx + 425 pages · Hardcover
ISBN 978-0-898716-46-7 · List Price \$59.00
SIAM Member Price \$41.30 · **OT104**

Linear Feedback Control: Analysis and Design with MATLAB

Dingyü Xue, YangQuan Chen, and Derek P. Atherton

2007 · xii + 356 pages · Softcover
ISBN 978-0-898716-38-2 · List Price \$99.00
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plications of Omnipotence, Omniscience, Immortality, and Incomprehensibility, by Steven Brams. Springer, second edition, November 2007. ISBN-13: 978-0-387-48065-7. (Reviewed February 2008.)

The Symmetries of Things, by John H. Conway, Heidi Burgiel, and Chaim Goodman-Strauss. A K Peters, May 2008. ISBN-13: 978-1-5688-1220-5.

Symmetry: A Journey into the Patterns of Nature, by Marcus du Sautoy. Harper, March 2008. ISBN-13: 978-0-0607-8940-4.

**Symmetry: The Ordering Principle (Wooden Books)*, by David Wade. Walker and Company, October 2006. ISBN-13: 978-08027-153-88.

Thinking about Gödel and Turing: Essays on Complexity, 1970-2007, by Gregory J. Chaitin. World Scientific, August 2007. ISBN-13: 978-9-8127-0895-3.

The Triumph of Numbers: How Counting Shaped Modern Life, by I. B. Cohen. W. W. Norton, July 2006. ISBN-13: 978-0-393-32870-7. (Reviewed December 2007.)

The Unfinished Game: Pascal, Fermat, and the Seventeenth-Century Letter That Made the World Modern, by Keith Devlin. Basic Books, September 2008. ISBN-13: 978-0-4650-0910-7.

Unknown Quantity: A Real and Imaginary History of Algebra, by John Derbyshire. Joseph Henry Press, May 2006. ISBN 0-309-09657-X. (Reviewed May 2008.)

Useless Arithmetic: Why Environmental Scientists Can't Predict the Future, by Orrin Pilkey and Linda Pilkey-Jarvis. Columbia University Press, February 2007. ISBN 0-231-13212-3. (Reviewed April 2008.)

The Volterra Chronicles: The Life and Times of an Extraordinary Mathematician, by Judith R. Goodstein. AMS, February 2007. ISBN-13: 978-0-8218-3969-0. (Reviewed March 2008.)

The Wraparound Universe, by Jean-Pierre Luminet. A K Peters, March 2008. ISBN-13: 978-1-5688-1309-7.

Zeno's Paradox: Unraveling the Ancient Mystery behind the Science of Space and Time, by Joseph Mazur. Plume, March 2008 (reprint edition). ISBN-13: 978-0-4522-8917-8.

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