

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.wustl.edu in the case of the editor and notices@ams.org in the case of the managing editor. The fax numbers are 314-935-6839 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

February 15, 2010: Applications for Enhancing Diversity in Graduate Education (EDGE) Summer Program.

See http://www.edgeforwomen.org/?page_id=5.

February 15, 2010: Applications for Institute for Pure and Applied Mathematics (IPAM) Research in Industrial Projects for Students (RIPS) undergraduate summer research program. See www.ipam.ucla.edu.

February 15, 2010: Applications for AMS-AAAS Congressional Fellowship. See <http://www.ams.org/government/congressfellowann.html> or contact the AMS Washington Office, telephone: 202-588-1100; email: amsdc@ams.org.

February 27, 2010: Entries for AWM Essay Contest. See <http://www.awm-math.org/biographies/contest.html>.

March 1, 2010: Applications for Summer Program for Women in Mathematics (SPWM2010). Contact the director, Murli M. Gupta, email: mmg@gwu.edu; telephone: 202-994-4857; or see the website <http://www.gwu.edu/~spwm/>.

March 1, 2010: Applications for Clay Mathematics Institute (CMI) Summer School on Probability and Statistical Physics in Two (and More) Dimensions.

Where to Find It

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

AMS Bylaws—November 2009, p. 1320

AMS Email Addresses—February 2010, p. 268

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

AMS Officers 2008 and 2009 Updates—May 2009, p. 651

AMS Officers and Committee Members—October 2009, p. 1133

Conference Board of the Mathematical Sciences—September 2009, p. 977

IMU Executive Committee—December 2009, p. 1465

Information for Notices Authors—June/July 2009, p. 749

Mathematics Research Institutes Contact Information—August 2009, p. 854

National Science Board—January 2010, p. 68

New Journals for 2008—June/July 2009, p. 751

NRC Board on Mathematical Sciences and Their Applications—March 2010, p. 423

NRC Mathematical Sciences Education Board—April 2009, p. 511

NSF Mathematical and Physical Sciences Advisory Committee—February 2010, p. 272

Program Officers for Federal Funding Agencies—October 2009, p. 1126 (DoD, DoE); December 2007, p. 1359 (NSF); December 2009, p. 1464 (NSF Mathematics Education)

Program Officers for NSF Division of Mathematical Sciences—November 2009, p. 1313

See <http://www.claymath.org/summerschool> or email: summerschool@claymath.org

March 8, 2010: Full proposals for NSF program in Proactive Recruitment in Introductory Science and Mathematics (PRISM). See "Mathematics Opportunities" in this issue.

March 31, 2010: Nominations for 2010 TWAS Prizes. See "Mathematics Opportunities" in this issue.

April 15, 2010: Applications for fall 2010 semester of Math in Moscow. See <http://www.mccme.ru/mathin-moscow> 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/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.

May 1, 2010: Applications for May review for National Academies Postdoctoral and Senior Research Associateship Program. See http://sites.nationalacademies.org/PGA/RAP/PGA_050491 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.

May 1, 2010: Applications for the fall 2010 program of the Christine Mirzayan Science and Technology Policy Graduate Fellowship program of the National Academies. See <http://sites.nationalacademies.org/PGA/policyfellows/index.htm> or contact The National Academies Christine Mirzayan Science and Technology Policy Graduate Fellowship Program, 500 Fifth Street, NW, Room 508, Washington, DC 20001; telephone: 202-334-2455; fax: 202-334-1667; email: policy-fellows@nas.edu.

May 1, 2010: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone: 703-934-0163; or email: awm@awm-math.org. The postal address is: Association for Women in Mathematics, 11240

Waples Mill Road, Suite 200, Fairfax, VA 22030.

June 1, 2010: Applications for NSF's Enhancing the Mathematical Sciences Workforce in the Twenty-First Century (EMSW21) program. See <http://www.nsf.gov/pubs/2005/nsf05595/nsf05595.htm>.

July 31, 2010: Nominations and applications for the 2010 Monroe H. Martin Prize. Contact R. Roy, Director, Institute for Physical Science and Technology, University of Maryland, College Park, Maryland 20742-2431.

August 1, 2010: Applications for August review for National Academies Postdoctoral and Senior Research Associateship Program. See http://sites.nationalacademies.org/PGA/RAP/PGA_050491 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.

October 1, 2010: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone: 703-934-0163; email: awm@awm-math.org; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

November 1, 2010: Applications for November review for National Academies Postdoctoral and Senior Research Associateship Program. See http://sites.nationalacademies.org/PGA/RAP/PGA_050491 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.

Board on Mathematical Sciences and Their Applications, National Research Council

The Board on Mathematical Sciences and Their Applications (BMSA) was established in November 1984 to lead activities in the mathematical sciences at the National Research Council (NRC). The mission of BMSA is to support and promote the quality and health of the mathematical sciences and their benefits to the nation. Following are the current BMSA members.

Tanya Styblo Beder, SB Consulting Corporation

Philip Bernstein, Microsoft Corporation

Patricia Brennan, University of Wisconsin

Emery N. Brown, Massachusetts Institute of Technology, Harvard Medical School

Gerald G. Brown, Naval Postgraduate School

Ricardo Caballero, Massachusetts Institute of Technology

Gunnar Carlsson, Stanford University

Brenda Dietrich, IBM Thomas J. Watson Research Center

Debra Elkins, Allstate Insurance Company

Susan Friedlander, University of Southern California

Peter Wilcox Jones, Yale University

Kenneth L. Judd, Stanford University

C. David Levermore, (Chair), University of Maryland

Charles M. Lucas, Deer Isle Consulting

Vijayan N. Nair, University of Michigan

Claudia Neuhauser, University of Minnesota

J. Tinsley Oden, University of Texas at Austin

Donald Saari, University of California at Irvine

J. B. Silvers, Case Western Reserve University

George Sugihara, University of California, San Diego.

The postal address for BMSA is: Board on Mathematical Sciences and Their Applications, National Academy of Sciences, Room K974, 500 Fifth Street, NW, Washington, DC 20001; telephone: 202-334-2421; fax: 202-334-2422/2101; email: bms@nas.edu; website: http://www7.nationalacademies.org/bms/BMSA_Members.html.

Book List

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.

The Archimedes Codex: How a Medieval Prayer Book Is Revealing the True Genius of Antiquity's Greatest Scientist, by Reviel Netz and William Noel. Da Capo Press, October 2007. ISBN 978-03068-1580-5. (Reviewed September 2008.)

The Calculus of Friendship: What a Teacher and Student Learned About Life While Corresponding About Math, by Steven Strogatz. Princeton University Press, August 2009. ISBN-13: 978-06911-349-32.

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: 978-15602-5992-3. (Reviewed May 2009.)

Chez les Weils (French), by Sylvie Weil. Buchet-Chastel, January 2009. ISBN-13: 978-22830-236-93.

Crocheting Adventures with Hyperbolic Planes, by Daina Taimina. A K Peters, March 2009. ISBN-13: 978-15688-145-20.

Decoding the Heavens: A 2,000-Year-Old Computer—and the Century-Long Search to Discover Its Secrets, by Jo Marchant. Da Capo Press, February 2009. ISBN-13: 978-03068-174-27.

Embracing the Wide Sky: A Tour Across the Horizons of the Human Mind, by Daniel Tammet. Free Press, January 2009. ISBN-13: 978-14165-696-95.

Ernst Zermelo: An Approach to His Life and Work, by Heinz-Dieter Ebbinghaus. Springer, April 2007. ISBN-13 978-3-540-49551-2. (Reviewed August 2009.)

Gaming the Vote (Why Elections Aren't Fair and What We Can Do About It), by William Poundstone. Hill and Wang, February 2009. ISBN-13: 978-08090-489-22.

The Housekeeper and the Professor, by Yoko Ogawa. Picador, February 2009. ISBN-13: 978-03124-278-01.

How to Think Like a Mathematician: A Companion to Undergraduate Mathematics, by Kevin Houston. Cambridge University Press, March 2009. ISBN-13: 978-05217-197-80.

Leonhard Euler and His Friends: Switzerland's Great Scientific Expatriate, by Luis-Gustave du Pasquier (translated by John S. D. Glaus). CreateSpace, July 2008. ISBN: 978-14348-332-73.

Lewis Carroll in Numberland: His Fantastical Mathematical Logical Life: An Agony in Eight Fits, by Robin Wilson. W. W. Norton & Company. ISBN-13: 978-03930-602-70.

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.

The Mathematical Mechanic: Using Physical Reason to Solve Problems, by Mark Levi. Princeton University Press. ISBN: 978-0691140209.

**Mathematicians: An Outer View of the Inner World*, by Mariana Cook, Princeton University Press, June 2009. ISBN13: 978-0-691-13951-7.

Mathematicians Fleeing from Nazi Germany: Individual Fates and Global Impact, by Reinhard Siegmund-Schultze. Princeton University Press, July 2009. ISBN 978-0-691-14041-4.

Mathematicians of the World, Unite! The International Congress of Mathematicians: A Human Endeavor, by Guillermo P. Curbera. A K Peters, March 2009. ISBN-13: 978-15688-133-01.

Mathematics and Common Sense: A Case of Creative Tension, by Philip J. Davis. A K Peters, October 2006. ISBN 1-568-81270-1. (Reviewed June/July 2009.)

Mathematics Emerging: A Sourcebook 1540-1900, by Jacqueline Stedall. Oxford University Press, November 2008. ISBN-13: 978-01992-269-00.

Mathematics in Ancient Iraq: A Social History, by Eleanor Robson. Princeton University Press, August

2008. ISBN-13: 978-06910-918-22. (Reviewed in this issue.)

Mathematics in India, by Kim Plofker. Princeton University Press, January 2009. ISBN-13: 978-06911-206-76. (Reviewed in this issue.)

Mathematics in 10 Lessons: The Grand Tour, by Jerry P. King. Prometheus Books, May 2009. ISBN: 978-1-59102-686-0.

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.

The Millennium Prize Problems, edited by James Carlson, Arthur Jaffe, and Andrew Wiles. AMS, June 2006. ISBN-13: 978-08218-3679-8. (Reviewed December 2009.)

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

The Numbers Game: The Common-sense Guide to Understanding Numbers in the News, in Politics, and in Life, by Michael Blastland and Andrew Dilnot. Gotham, December 2008. ISBN-13: 978-15924-042-30.

The Numerati, by Stephen Baker. Houghton Mifflin, August 2008. ISBN-13: 978-06187-846-08. (Reviewed October 2009.)

Out of the Labyrinth: Setting Mathematics Free, by Robert Kaplan and Ellen Kaplan. Oxford University Press, January 2007. ISBN-13: 978-0-19514-744-5. (Reviewed June/July 2009.)

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

Perfect Rigor: A Genius and the Mathematical Breakthrough of the Century, by Masha Gessen. Houghton Mifflin Harcourt, November 2009. ISBN-13: 978-01510-140-64.

Picturing the Uncertain World: How to Understand, Communicate, and Control Uncertainty Through Graphical Display, by Howard Wainer. Princeton University Press, April 2009. ISBN-13: 978-06911-375-99.

Plato's Ghost: The Modernist Transformation of Mathematics, by Jeremy Gray. Princeton University Press, September 2008. ISBN-13: 978-06911-361-03. (Reviewed February 2010.)

The Princeton Companion to Mathematics, edited by Timothy Gowers (June Barrow-Green and Imre Leader,

associate editors). Princeton University Press, November 2008. ISBN-13: 978-06911-188-02. (Reviewed November 2009.)

Proofs from THE BOOK, by Martin Aigner and Günter Ziegler. Expanded fourth edition, Springer, October 2009. ISBN-13: 978-3-642-00855-9

Pythagoras' Revenge: A Mathematical Mystery, by Arturo Sangalli. Princeton University Press, May 2009. ISBN-13: 978-06910-495-57.

Recountings: Conversations with MIT Mathematicians, edited by Joel Segel. A K Peters, January 2009. ISBN-13: 978-15688-144-90.

Roger Bosovich, by Radoslav Dimitric (Serbian). Helios Publishing Company, September 2006. ISBN-13: 978-09788-256-21.

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

Solving Mathematical Problems: A Personal Perspective, by Terence Tao. Oxford University Press, September 2006. ISBN-13: 978-0-199-20560-8. (Reviewed February 2010.)

Sphere Packing, Lewis Carroll, and Reversi, by Martin Gardner. Cambridge University Press, July 2009. ISBN: 978-0521756075.

Strange Attractors: Poems of Love and Mathematics, edited by Sarah Glaz and JoAnne Grown. A K Peters, November 2008. ISBN-13: 978-15688-134-17. (Reviewed September 2009.)

The Strangest Man, by Graham Farmelo. Basic Books, August 2009. ISBN-13: 978-04650-182-77.

Super Crunchers: Why Thinking-by-Numbers Is the New Way to Be Smart, by Ian Ayres. Bantam, August 2007. ISBN-13: 978-05538-054-06. (Reviewed April 2009.)

Tools of American Math Teaching, 1800-2000, by Peggy Aldrich Kidwell, Amy Ackenberg-Hastings, and David Lindsay Roberts. Johns Hopkins University Press, July 2008. ISBN-13: 978-0801888144. (Reviewed January 2010.)

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.

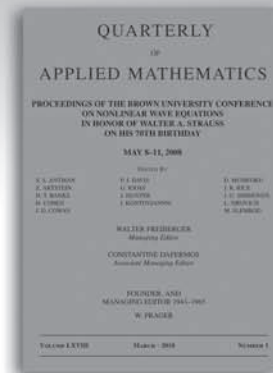
What Is a Number?: Mathematical Concepts and Their Origins, by Robert Tubbs. Johns Hopkins University Press, December 2008. ISBN-13: 978-08018-901-85.

What's Happening in the Mathematical Sciences, by Dana Mackenzie. AMS, 2009. ISBN-13: 978-08218-447-86.

Why Does $E=mc^2$? (And Why Should We Care?), by Brian Cox and Jeff Forshaw. Da Capo Press, July 2009. ISBN-13: 978-03068-175-88.

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.

AMERICAN MATHEMATICAL SOCIETY



Proceedings of the Brown University Conference on Nonlinear Wave Equations in Honor of Walter A. Strauss on his 70th Birthday, May 8-11, 2008

Walter Freiberger, Brown
University, Providence, RI,
Editor

This volume is a special issue of the *Quarterly of Applied Mathematics* journal. It represents the proceedings of the conference in honor of Walter Strauss's 70th birthday held at Brown University (Providence, RI) in May of 2008. The issue offers a collection of original and expository articles devoted to the study of nonlinear wave equations. The articles cover a wide range of topics, including scattering theory, dispersive waves, classical field theory, mathematical fluid mechanics, kinetic theory, and stability theory. The book offers a nice cross-section of current trends and research directions in the study of nonlinear wave equations.

Published by Brown University and distributed worldwide by the American Mathematical Society.

2010; 178 pages; Softcover; List
US\$49; Order code QAMSP2



www.ams.org/bookstore