
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

January 15, 2010: Applications for AMS-AAAS Mass Media Summer Fellowships. See <http://www.aaas.org/programs/education/>

MassMedia/, or contact Stacey Pasco, Manager, Mass Media Program, AAAS Mass Media Science and Engineering Fellows Program, 1200 New York Avenue, NW, Washington, DC 20005; telephone 202-326-6441; fax 202-371-9849; email: spasco@aaas.org. Also see <http://www.ams.org/government/massmediaann.html> or contact the AMS Washington Office, 1527 Eighteenth Street, NW, Washington, DC 20036; telephone 202-588-1100; fax 202-588-1853; email: amsdc@ams.org.

January 15, 2010: Applications for Jefferson Science Fellows

Program. See <http://sites.nationalacademies.org/PGA/jefferson/> or email: jstf@nas.edu or telephone 202-334-2643.

January 28, 2010: Applications for four 1-year junior visiting positions at CRM for the academic year 2010-11. See <http://www.crm.sns.it>.

January 28, 2010: Proposals for National Science Foundation Scientific Computing Research Environments for the Mathematical Sciences (SCREMS). See <http://www.nsf.gov/pubs/2007/nsf07502/nsf07502.htm>.

Where to Find It

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

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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

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NRC Board on Mathematical Sciences and Their Applications—March 2009, p. 404

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

February 1, 2010: Applications for February 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.

February 1, 2010: Applications for AWM Travel Grants and Mentoring 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.

February 5, 2010: Applications for Math for America Fellowship Program. See <http://www.mathforamerica.org/>.

February 11, 2010: Full proposals for NSF Undergraduate Biology and Mathematics (UBM) program. See “Mathematics Opportunities” in this issue.

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 <http://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). See “Mathematics Opportunities” in this issue.

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

Dimensions. See “Mathematics Opportunities” in this issue.

April 15, 2010: Applications for fall 2010 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.

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: policyfellows@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. See “Mathematics Opportunities” in this issue.

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.

MPS Advisory Committee

Following are the names and affiliations of the members of the Advisory Committee for Mathematical and Physical Sciences (MPS) of the National Science Foundation. The date of the expiration of each member’s term is given after his or her name. The website for the MPS directorate may be found at <http://www.nsf.gov/home/mps/>. The postal address is Directorate for the Mathematical and Physical Sciences, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230.

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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 Best of All Possible Worlds: Mathematics and Destiny, by Ivar Ekeland. University of Chicago Press, October 2006. ISBN-13: 978-0-226-19994-8. (Reviewed March 2009.)

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.

Crossing the Equal Sign, by Marion D. Cohen. Plain View Press, January 2007. ISBN-13: 978-18913-866-95.

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.

The Drunkard's Walk: How Randomness Rules Our Lives, by Leonard Mlodinow. Pantheon, May 2008. ISBN-13: 978-03754-240-45.

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 Math Explains the World: A Guide to the Power of Numbers, from Car Repair to Modern Physics, by James D. Stein. Collins, April 2008. ISBN-13: 978-00612-417-65.

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 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.

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

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 Behind NUMB3RS: Solving Crime with Mathematics, by Keith Devlin and Gary Lorden. Plume, August 2007. ISBN-13: 978-04522-8857-7. (Reviewed March 2009.)

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.)

Our Days Are Numbered: How Mathematics Orders Our Lives, by Jason Brown. McClelland and Stewart, April 2009. ISBN-13: 978-07710-169-67.

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 in this issue.)

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.

Rock, Paper, Scissors: Game Theory in Everyday Life, by Len Fisher. Basic Books, November 2008. ISBN-13: 978-04650-093-81.

**Roger Boscovich*, 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

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2006. ISBN-13: 978-0-199-20560-8.
(Reviewed in this issue.)

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 Growney. 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 Ackerberg-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

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This series, jointly published by the AMS and International Press, includes monographs, lecture notes, collections, and conference proceedings on current topics of importance in advanced mathematics. Harvard University Professor of Mathematics Shing-Tung Yau is Editor-in-Chief for the series. (ISSN 1089-3288) Hardcover and softcover.

For a complete listing of all books available within this series of books visit: www.ams.org/bookstore/amsipseries

Partial Differential Equations
Harold Levine, *Stanford University, CA*

Volume 6; 1997; 706 pages; Hardcover; ISBN: 978-0-8218-0775-0; List US\$80; AMS members US\$64; Order code AMSIP/6

Advances in String Theory
The First Sowers Workshop in Theoretical Physics
Eric Sharpe, *Virginia Polytechnic Institute & State University, Blacksburg, VA*, and Arthur Greenspoon, *American Mathematical Society, Ann Arbor, MI*, Editors

Volume 44; 2008; 244 pages; Softcover; ISBN: 978-0-8218-4764-0; List US\$65; AMS members US\$52; Order code AMSIP/44

Complex Differential Geometry
Fangyang Zheng, *Ohio State University, Columbus, OH*

Volume 18; 2000; 264 pages; Softcover; ISBN: 978-0-8218-2960-8; List US\$54; AMS members US\$43; Order code AMSIP/18.S

Heat Kernel and Analysis on Manifolds
Alexander Grigor'yan, *University of Bielefeld, Germany*

Volume 47; 2009; 482 pages; Hardcover; ISBN: 978-0-8218-4935-4; List US\$119; AMS members US\$95; Order code AMSIP/47

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