

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

March 31, 2009: Nominations for prizes of the Academy of Sciences for the Developing World. See "Mathematics Opportunities" in this issue.

March 31, 2009: Submissions for Plus Magazine New Writers Award. See the website <http://plus.maths.org/competition/>.

April 2, 2009: Full proposals for NSF Program in Foundations of Data and Visual Analytics (FODAVA). 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/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.

April 17, 2009: Applications for Project Next: New Experiences in

Teaching. See "Mathematics Opportunities" in this issue.

April 24, 2009: Proposals for 2010 NSF-CBMS Regional Conferences. See "Mathematics Opportunities" in this issue.

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.

May 15-June 15, 2009: Proposals for DMS Workforce Program in the Mathematical Sciences. See "Mathematics Opportunities" in this issue.

May 15, 2009: Applications for National Academies Research Associate-ship Programs. See <http://www7.nationalacademies.org/rap/> or

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 2009, p. 278

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

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

AMS Officers and Committee Members—October 2008, p. 1122

Conference Board of the Mathematical Sciences—September 2008, p. 980

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Mathematics Research Institutes Contact Information—August 2008, p. 844

National Science Board—January 2009, p. 67

New Journals for 2006, 2007—June/July 2008, p. 725

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 2009, p. 278

Program Officers for Federal Funding Agencies—October 2008, p. 1116 (DoD, DoE); November 2008, p. 1297 (NSF Division of Mathematical Sciences); December 2008, p. 1440 (NSF Mathematics Education)

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

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.

June 1, 2009: Applications for the September program of the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program of the National Academies. See <http://www7.nationalacademies.org/policyfellows>; 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.

June 1, 2009: Applications for the Math for America Foundation (MfA) Fellowship Program in San Diego. See <http://www.mathforamerica.org/>.

June 2, 2009: Proposals for NSF's Enhancing the Mathematical Sciences Workforce in the Twenty-First Century program. See http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05595.

June 30, 2009: Applications for Fermat Prize for Mathematics Research. Contact Prix Fermat de Recherche en Mathématiques, Service Relations Publiques, Université Paul Sabatier, 31062 Toulouse Cedex 9, France, or see the website <http://www.math.ups-tlse.fr/Fermat/>.

August 4, 2009: Letters of intent for NSF Project ADVANCE Institutional Transformation (IT) and Institutional Transformation Catalyst (IT-Catalyst) awards. See http://www.nsf.gov/pubs/2009/nsf09504/nsf09504.htm?govDel=USNSF_25.

August 4, 2009: Full proposals (by invitation only) for NSF Partnerships for International Research and Education (PIRE). See http://www.nsf.gov/pubs/2009/nsf09505/nsf09505.htm?govDel=USNSF_25#awd_info.

August 15, 2009: Applications for National Academies Research Associateship Programs. See <http://www7.nationalacademies.org/rap/> 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.

September 14, 2009: Full proposals for NSF Integrative Graduate Education and Research Training (IGERT). See http://www.nsf.gov/pubs/2009/nsf09519/nsf09519.htm?govDel=USNSF_25.

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.

November 1, 2009: Applications for the January program of the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program of the National Academies. See <http://www7.nationalacademies.org/policyfellows>; 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.

November 12, 2009: Full proposals for NSF Project ADVANCE Institutional Transformation (IT) and Institutional Transformation Catalyst (IT-Catalyst) awards. See http://www.nsf.gov/pubs/2009/nsf09504/nsf09504.htm?govDel=USNSF_25.

November 15, 2009: Applications for National Academies Research Associateship Programs. See <http://www7.nationalacademies.org/rap/> 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.

Mathematical Sciences Education Board, National Research Council

Jan de Lange, Freudenthal Institute, The Netherlands

Keisha M. Ferguson, Pattengill Elementary School, Ann Arbor, MI

Louis Gomez, Northwestern University

Javier Gonzalez, Pioneer High School, Whittier, CA

Sharon Griffin, Clark University
Phillip A. Griffiths (chair), Institute for Advanced Study

Arthur Jaffe, Harvard University

Jeremy Kilpatrick, University of Georgia

Julie Legler, St. Olaf College

W. James Lewis, University of Nebraska, Lincoln

Kevin F. Miller, University of Michigan, Ann Arbor

Marge Petit (vice chair), Consultant, Fayston, VT

Donald Saari, University of California, Irvine

Nancy J. Sattler, Terra State Community College, Freemont, OH

Richard J. Schaar, Texas Instruments

Frank Wang, Oklahoma School of Science and Mathematics

MSEB Staff

David R. Mandel, Director

The contact information is: Mathematical Sciences Education Board, National Academy of Sciences, 500 Fifth Street, NW, 11th Floor, Washington, DC 20001; telephone 202-334-2353; fax 202-344-2210; email: mseb@nas.edu; World Wide Web <http://www7.nationalacademies.org/MSEB/>.

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.

An Abundance of Katherines, by John Green. Dutton Juvenile Books, September 2006. ISBN-13:978-0-5254-7688-7. (Reviewed October 2008.)

The Annotated Turing: A Guided Tour Through Alan Turing's Historic Paper on Computability and the Turing Machine, by Charles Petzold. Wiley, June 2008. ISBN-13: 978-04702-290-57.

The Archimedes Codex, by Reviel Netz and William Noel. Weidenfeld and Nicolson, May 2007. ISBN-13: 978-0-29764-547-4. (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 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 Cat in Numberland, by Ivar Ekeland. Cricket Books, April 2006. ISBN-13: 978-0-812-62744-2. (Reviewed January 2009.)

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

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.

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

Einstein's Mistakes: The Human Failings of Genius, by Hans C. Ohanian. W. W. Norton, September 2008. ISBN-13: 978-0393062939.

**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.

Emmy Noether: The Mother of Modern Algebra, by M. B. W. Tent. A K Peters, October 2008. ISBN-13: 978-15688-143-08.

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.

Euler's Gem: The Polyhedron Formula and the Birth of Topology, by David S. Richeson. Princeton University

Press, September 2008. ISBN-13: 97-80691-1267-77.

Fifty Mathematical Ideas You Really Need to Know, by Tony Crilly. Quercus, 2007. ISBN-13: 978-18472-400-88.

Fighting Terror Online: The Convergence of Security, Technology and the Law, by Martin Charles Golumbic. Springer, 2008. ISBN: 978-0-387-73577-1.

Five-Minute Mathematics, by Ehrhard Behrends (translated by David Kramer). AMS, May 2008. ISBN-13: 978-08218-434-82.

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.

Geometric Origami, by Robert Geretschläger. Arbelos, October 2008. ISBN-13: 978-09555-477-13.

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: 978-08090-521-96. (Reviewed February 2009.)

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.

Hexaflexagons, Probability Paradoxes, and the Tower of Hanoi: Martin Gardner's First Book of Mathematical Puzzles and Games, by Martin Gardner. Cambridge University Press, September 2008. ISBN-13: 978-0-521-73525-4.

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 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.)

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.)

Is God a Mathematician? by Mario Livio. Simon & Schuster, January 2009. ISBN-13: 978-07432-940-58.

Kiss My Math: Showing Pre-Algebra Who's Boss, by Danica McKellar. Hudson Street Press, August 2008. ISBN-13: 978-1594630491.

The Last Theorem, by Arthur C. Clarke and Frederik Pohl. Del Rey, August 2008. ISBN-13: 978-0345470218.

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.

The Map of My Life, by Goro Shimura. Springer, September 2008. ISBN-13: 978-03877-971-44.

Mathematical Omnibus: Thirty Lectures on Classic Mathematics, by Dmitry Fuchs and Serge Tabachnikov. AMS, October 2007. ISBN-13: 978-08218-431-61. (Reviewed December 2008.)

The Mathematician's Brain, by David Ruelle. Princeton University Press, July 2007. ISBN-13 978-0-691-12982-2. (Reviewed November 2008.)

Mathematics and the Aesthetic: New Approaches to an Ancient Affinity, edited by Nathalie Sinclair, David Pimm, and William Higginson. Springer, November 2006. ISBN-13: 978-03873-052-64. (Reviewed February 2009.)

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. (Reviewed November 2008.)
- Mathematics in Ancient Iraq: A Social History*, by Eleanor Robson. Princeton University Press, August 2008. ISBN-13: 978-06910-918-22.
- 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.)
- 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.)
- Number and Numbers*, by Alain Badiou. Polity, June 2008. ISBN-13: 978-07456-387-82.
- 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: 978-04522-8857-7. (Reviewed March 2009.)
- The Numerati*, by Stephen Baker. Houghton Mifflin, August 2008. ISBN-13: 978-06187-846-08.
- One to Nine: The Inner Life of Numbers*, by Andrew Hodges. W. W. Norton, May 2008. ISBN-13: 978-03930-664-18.
- Origami, Eleusis, and the Soma Cube: Martin Gardner's Mathematical Diversions*, by Martin Gardner. Cambridge University Press, September 2008. ISBN-13: 978-0-521-73524-7.
- Our Days Are Numbered: How Mathematics Orders Our Lives*, by Jason Brown. McClelland and Stewart, to appear April 2009. ISBN-13: 978-07710-169-67.
- A Passion for Discovery*, by Peter Freund. World Scientific, August 2007. ISBN-13: 978-9-8127-7214-5.
- Plato's Ghost: The Modernist Transformation of Mathematics*, by Jeremy Gray. Princeton University Press, September 2008. ISBN-13: 978-06911-361-03.
- The Presidential Election Game*, by Steven J. Brams. A K Peters, December 2007. ISBN-13: 978-1-5688-1348-6.
- 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.
- Professor Stewart's Cabinet of Mathematical Curiosities*, by Ian Stewart. Basic Books, December 2008. ISBN-13: 978-0-465-01302-9.
- 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.)
- Pythagorean Crimes*, by Tefros Michalides. Parmenides Publishing, September 2008. ISBN-13: 978-19309-722-78. (Reviewed January 2009.)
- Random Curves: Journeys of a Mathematician*, by Neal Koblitz. Springer, December 2007. ISBN-13: 978-3-5407-4077-3.
- Reminiscences of a Statistician: The Company I Kept*, by Erich Lehmann. Springer, November 2007. ISBN-13: 978-0-387-71596-4.
- Rock, Paper, Scissors: Game Theory in Everyday Life*, by Len Fisher. Basic Books, November 2008. ISBN-13: 978-04650-093-81.
- 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. (Reviewed December 2008.)
- Sacred Mathematics: Japanese Temple Geometry*, by Fukagawa Hidetoshi and Tony Rothman. Princeton University Press, July 2008. ISBN-13: 978-0-6911-2745-3.
- The Shape of Content: An Anthology of Creative Writing in Mathematics and Science*, edited by Chandler Davis, Marjorie Wikler Senechal, and Jan Zwicky. A K Peters, November 2008. ISBN-13: 978-15688-144-45.
- Souvenirs sur Sofia Kovalevskaya (French)*, by Michèle Audin. Calvage et Mounet, October 2008. ISBN-13: 978-29163-520-53.
- 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.
- 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 in this issue.)
- 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.
- 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.
- 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.
- The Unimaginable Mathematics of Borges' Library of Babel*, by William Goldbloom Bloch. Oxford University Press, August 2008. ISBN-13: 978-01953-345-79.
- 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.)
- *What's Happening in the Mathematical Sciences*, by Dana Mackenzie. AMS, 2009. ISBN-13: 978-08218-447-86.
- The Wraparound Universe*, by Jean-Pierre Luminet. A K Peters, March 2008. ISBN 978-15688-130-97. (Reviewed December 2008.)
- 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.