

# 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, 2008:** Nominations for prizes of the Academy of Sciences for the Developing World (TWAS). See <http://www.twas.org/>.

**March 31, 2008:** Nominations for 2008 Prize for Achievement in Information-Based Complexity. Contact

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

**April 15, 2008:** Applications for Math in Moscow for fall 2008. 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`; or contact Math in

## 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 (Council, Executive Committee, Publications Committees, Board of Trustees)**—May 2007, p. 657

**AMS Officers and Committee Members**—October 2007, p. 1178

**Conference Board of the Mathematical Sciences**—September 2007, p. 1019

**IMU Executive Committee**—December 2007, p. 1526

**Information for Notices Authors**—June/July 2007, p. 765

**Mathematics Research Institutes Contact Information**—August 2007, p. 898

**National Science Board**—January 2008, p. 69

**New Journals for 2005, 2006**—June/July 2007, p. 767

**NRC Board on Mathematical Sciences and Their Applications**—March 2008, p. 401

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

**NSF Mathematical and Physical Sciences Advisory Committee**—February 2008, p. 276

**Program Officers for Federal Funding Agencies**—October 2007, p. 1173 (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 2007, p. 1022

Moscow Program, Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904-2294; email: student-serv@ams.org.

**April 18, 2008:** Applications for Project NExT: New Experiences in Teaching. See “Mathematics Opportunities” in this issue.

**May 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.

**May 1, 2008:** Applications for May 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.

**May 15-June 15, 2008:** Proposals for DMS Workforce Program in the Mathematical Sciences. See “Mathematics Opportunities” in this issue.

**June 1, 2008:** Applications for Christine Mirzayan Science and Technology Policy Graduate Fellowship Fall Program. 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 10, 2008:** Proposals for Enhancing the Mathematical Sciences Workforce in the Twenty-First Century. See [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf05595](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05595).

**August 1, 2008:** Applications for August 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.

**August 18, 2008:** Applications for NSF Research Experiences for Undergraduates (REU) program sites. See [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf07569](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07569).

**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.

**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.

### 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/About%20MSEB.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.

*Alfred Tarski: Life and Logic*, by Anita Burdman Feferman and Solomon Feferman. Cambridge University Press, October 2004. ISBN 0-521-80240-7. (Reviewed September 2007.)

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

*Ants, Bikes, and Clocks: Problem Solving for Undergraduates*, by William Briggs. Society for Industrial and Applied Mathematics, 2005. ISBN 0-89871-574-1.

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

*The Art of Mathematics: Coffee Time in Memphis*, by Béla Bollobás. Cambridge University Press, September 2006. ISBN-13: 978-0-52169-395-0.

*The Artist and the Mathematician: The Story of Nicolas Bourbaki, the Genius Mathematician Who Never Existed*, by Amir D. Aczel. Thunder's Mouth Press, August 2006. ISBN 1-560-25931-0. (Reviewed October 2007.)

*Benjamin Franklin's Numbers: An Unsung Mathematical Odyssey*, by Paul C. Pasles. Princeton University Press, October 2007. ISBN-13: 978-0-69112-956-3.

*Bourbaki, a Secret Society of Mathematicians*, by Maurice Mashaal. AMS, June 2006. ISBN 0-8218-3967-5. (Reviewed October 2007.)

*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: 978-1-56025-992-3.

*The Cat in Numberland*, by Ivar Ekeland. Cricket Books, April 2006. ISBN-13: 978-0-8126-2744-2.

*A Certain Ambiguity: A Mathematical Novel*, by Gaurav Suri and Hartosh Singh Bal. Princeton University Press, June 2007. ISBN-13: 978-0-691-12709-5. (Reviewed February 2008.)

*Chases and Escapes: The Mathematics of Pursuit and Evasion*, by Paul J. Nahin. Princeton University Press, May 2007. ISBN-13: 978-0-69112-514-5.

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

*Does Measurement Measure Up?: How Numbers Reveal and Conceal the Truth*, by John Henshaw. Johns Hopkins University Press, March 2006. ISBN-13: 978-08018-8375-0.

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

*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: 978-0-691-12822-1. (Reviewed in this issue.)

*The Great  $\pi/e$  Debate: Which Is the Better Number?*, DVD by Colin Adams

and Thomas Garrity. Mathematical Association of America, 2007. ISBN 0-88385-900-9.

*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.)

*I Am a Strange Loop*, by Douglas R. Hofstadter. Basic Books, March 2007. ISBN-13: 978-0-46503-078-1. (Reviewed August 2007.)

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

*An Introduction to Gödel's Theorems*, by Peter Smith. Cambridge University Press, August 2007. ISBN-13: 978-0-52167-453-9.

*John von Neumann: Selected Letters*, edited by Miklós Rédei. AMS, November 2005. ISBN 0-8218-3776-1. (Reviewed June/July 2007.)

*Karl Pearson: The Scientific Life in a Statistical Age*, by Theodore M. Porter. Princeton University Press, (new edition) December 2005. ISBN-13: 978-0-69112-635-7. (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*, by Emil A. Fellmann. Birkhäuser, 2007. ISBN-13: 978-3-7643-7538-6.

*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.)

*Letters to a Young Mathematician*, by Ian Stewart. Perseus Books, April 2006. ISBN-13: 978-0-465-08231-5. (Reviewed May 2007.)

*The Math behind the Music*, by Leon Harkleroad. Cambridge University Press, August 2006. ISBN-13: 978-0-521-00935-5.

*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: 978-15688-1336-3.

*The Mathematician's Brain*, by David Ruelle. Princeton University Press, July 2007. ISBN-13: 978-0-691-12982-2.

*Mathematics at Berkeley: A History*, by Calvin C. Moore. AKPeters, February 2007. ISBN-13: 978-15688-130-28.

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

*The Mind of the Mathematician*, by Michael Fitzgerald and Ioan James. Johns Hopkins University Press, May 2007. ISBN-13: 978-0-8018-8587-7.

*More Mathematical Astronomy Morsels*, by Jean Meeus. Willmann-Bell, 2002. ISBN 0-943396-743.

*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.

*The Motion Paradox: The 2,500-Year Old Puzzle behind All the Mysteries of Time and Space*, by Joseph Mazur. Dutton Adult, April 2007. ISBN-13: 978-0-52594-992-3.

*Mr. Hopkins' Men: Cambridge Reform and British Mathematics in the 19th Century*, by A. D. D. Craki. Springer, July 2007. ISBN-13: 978-1-8462-8790-9.

*Music and Probability*, by David Temperley. MIT Press, January 2007. ISBN-13: 978-0-262-20166-7.

*Music: A Mathematical Offering*, by David J. Benson. Cambridge University Press, December 2006. ISBN-13: 978-0-521-61999-8.

*Negative Math: How Mathematics Rules Can Be Positively Bent*, by Alberto A. Martinez. Princeton University Press, November 2005. ISBN-13: 978-0-691-12309-7.

*New Theories of Everything*, by John D. Barrow. Oxford University Press, July 2007. ISBN-13: 978-0-192-80721-2.

*Nonplussed! Mathematical Proof of Implausible Ideas*, by Julian Havil. Princeton University Press, May 2007. ISBN-13: 978-0-691-12056-0.

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

*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.

*Perfect Figures: The Lore of Numbers and How We Learned to Count*, by Bunny Crumacker. Thomas Dunne Books, August 2007. ISBN-13: 978-03123-6005-4.

*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 Probability of God: A Simple Calculation That Proves the Ultimate Truth*, by Stephen D. Unwin. Three Rivers Press (October 26, 2004). ISBN-13: 978-14000-5478-7. (Reviewed February 2008.)

*Project Origami: Activities for Exploring Mathematics*, by Thomas Hull. A K Peters, March 2006. ISBN 1-568-81258-2. (Reviewed May 2007.)

*Pythagoras: His Life, Teaching and Influence*, by Christoph Riedweg. Translated by Steven Rendall. Cornell University Press, March 2005. ISBN-13: 978-0-80144-240-7.

*Pythagoras: The Mathematician*, by Karim El-koussa. Cloonfad Press, September 2005. ISBN-13: 978-0-97694-042-5.

*The Pythagorean Theorem: A 4000-Year History*, by Eli Maor. Princeton University Press, May 2007. ISBN-13: 978-0-69112-526-8.

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

*The Square Root of 2: A Dialogue Concerning a Number and a Sequence*, by David Flannery. Springer, December 2005. ISBN-13: 978-0-38720-220-4.

*Superior Beings: If They Exist, How Would We Know? Game-Theoretic Implications of Omnipotence, Omniscience, Immortality, and Incomprehensibility*, by Steven Brams. Springer, second edition, November 2007. ISBN-13: 978-0-387-48065-7. (Reviewed February 2008.)

*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 Trouble with Physics: The Rise of String Theory, the Fall of a Science, and What Comes Next*, by Lee Smolin. Joseph Henry Press, October 2006. ISBN 0-309-10192-1. (Reviewed September 2007.)

*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 in this issue.)

*The Volterra Chronicles: The Life and Times of an Extraordinary Mathematician*, by Judith R. Goodstein. AMS, February 2007. ISBN-13: 978-0-821-83969-0. (Reviewed March 2008.)

*Why Beauty Is Truth: The Story of Symmetry*, by Ian Stewart. Perseus Books Group, April 2007. ISBN-13: 978-0-46508-236-0.

*Yearning for the Impossible: The Surprising Truths of Mathematics*, by John Stillwell. A K Peters, May 2006. ISBN 1-568-81254-X. (Reviewed June/July 2007.)

*You Failed Your Math Test, Comrade Einstein: Adventures and Misadventures of Young Mathematicians, or Test Your Skills in Almost Recreational Mathematics*, edited by M. Shifman. World Scientific, June 2005. ISBN-13: 978-9-8125-6279-1.

REFERENCE & BOOK LIST