
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 21, 2006: Preliminary proposals for NSF Program in Informal Science Education. See "Mathematics Opportunities" in this issue.

March 31, 2006: Applications for AMS Congressional Fellowships. See <http://www.ams.org/government/congressfellowann.html> or contact the AMS Washington office at 202-588-1100; email: amsdc@ams.org.

March 31, 2006: Nominations for the Prize for Achievement in Information-Based Complexity. Contact Joseph Traub, traub@cs.columbia.edu.

March 31, 2006: Nominations for Third World Academy of Sciences Prizes. See <http://www.twas.org/>.

April 7, 2006: Proposals for 2007 NSF-CBMS Regional Conferences. See the CBMS website, http://www.cbmsweb.org/NSF/2007_call.htm, or contact: Conference Board of the

Where to Find It

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

AMS Bylaws—November 2005, p. 1239

AMS Email Addresses—February 2006, p. 251

AMS Ethical Guidelines—June/July 2004, p. 675

AMS Officers 2004 and 2005 (Council, Executive Committee, Publications Committees, Board of Trustees)—May 2005, p. 564

AMS Officers and Committee Members—October 2005, p. 1073

Conference Board of the Mathematical Sciences—September 2005, p. 892

Information for Notices Authors—June/July 2005, p. 660

Mathematics Research Institutes Contact Information—August 2005, p. 770

National Science Board—January 2006, p. 62

New Journals for 2004—June/July 2005, p. 662

NRC Board on Mathematical Sciences and Their Applications—March 2006, p. 369

NRC Mathematical Sciences Education Board—April 2006, p. 488

NSF Mathematical and Physical Sciences Advisory Committee—February 2006, p. 255

Program Officers for Federal Funding Agencies—October 2005, p. 1069 (DoD, DoE); November 2005, p. 1223 (NSF)

Stipends for Study and Travel—September 2005, p. 900

Mathematical Sciences, 1529 Eighteenth Street, NW, Washington, DC 20036; telephone: 202-293-1170; fax: 202-293-3412; email: 1ko1be@maa.org or rosier@georgetown.edu.

April 20, 2006: Proposals for NSF Program in Mathematical, Social, and Behavioral Sciences. See "Mathematics Opportunities" in this issue.

May 1, 2006: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone 703-934-0163; email: awm@math.umd.edu; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

May 31, 2006: Registration for the Thirteenth International Mathematics Competition for University Students (IMC). See the website <http://www.imc-math.org> or contact John E. Jayne, Department of Mathematics, University College London, Gower Street, London WC1E 6BT, United Kingdom; telephone +44-20-7679-7322; fax +44-20-7419-2812; email: j.jayne@imc-math.org.

June 1, 2006: Applications for fall program of the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program of the National Academies. See the website <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.

June 22, 2006: Full proposals for NSF Program in Informal Science Education. See "Mathematics Opportunities" in this issue.

October 1, 2006: Applications for AWM Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone 703-934-0163; email: awm@math.umd.edu; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

Mathematical Sciences Education Board, National Research Council

Jan de Lange, Freudenthal Institute, The Netherlands

Keisha M. Ferguson, Pattengill Elementary School, Ann Arbor, Michigan
Louis Gomez, Northwestern University

Javier Gonzalez, Pioneer High School, Whittier, California

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
Jim Lewis, University of Nebraska, Lincoln

Kevin F. Miller, University of Michigan, Ann Arbor
Marge Petit (vice chair), Consultant, Fayston, Vermont

Donald Saari, University of California, Irvine
Nancy J. Sattler, Terra State Community College, Freemont, Ohio

Richard J. Schaar, Texas Instruments
Frank Wang, Oklahoma School of Science and Mathematics

MSEB Staff

David R. Mandel, Director
Mary Ann Kasper, Senior Program Assistant

The contact information is: Mathematical Sciences Education Board, National Academy of Sciences, 500 Fifth Street, NW, 11th Floor, Washington, DC 20001; telephone 202-334-3294; fax 202-344-1453; email: mseb@nas.edu; World Wide Web http://www7.nationalacademies.org/mseb/1MSEB_Membership.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.

A³ & His Algebra: How a Boy from Chicago's West Side Became a Force in American Mathematics, by Nancy E. Albert. iUniverse, Inc., January 2005. ISBN 0-595-32817-2. (Reviewed December 2005.)

Action This Day, edited by Michael Smith and Ralph Erskine. Random House of Canada, February 2003. ISBN 0-593-04910-1.

Beyond Coincidence: Amazing Stories of Coincidence and the Mystery and Mathematics behind Them, by Martin Plimmer and Brian King. Thomas Dunne Books, December 2005. ISBN 0-312-34036-2.

The Book of Presidents. London Mathematical Society, 2005. ISBN 0-950-27341-4.

A Brief History of Infinity, by Paolo Zellini. Penguin Books (paperback), March 2005. ISBN 0-141-00762-1.

The Calculus Gallery: Masterpieces from Newton to Lebesgue, by William Dunham. Princeton University Press, December 2004. ISBN 0-691-09565-5.

Chance: A Guide to Gambling, Love, the Stock Market and Just About Everything Else, by Amir D. Aczel. Thunder's Mouth Press, October 2004. ISBN 1-56858-316-8. (Reviewed August 2005.)

Change Is Possible: Stories of Women and Minorities in Mathematics, by Patricia Clark Kenschaft. AMS, September 2005. ISBN 0-8218-3748-6.

Coincidences, Chaos, and All That Math Jazz: Making Light of Weighty Ideas, by Edward B. Burger and Michael Starbird. W. W. Norton, August 2005. ISBN 0-393-05945-6.

The Colours of Infinity: The Beauty and Power of Fractals, by Michael Barnsley, Nigel Lesmoir-Gordon, Benoît B. Mandelbrot, Ian Stewart, Gary Flake, Robert Prechter, and Arthur C. Clarke. Clear Press, March 2004. ISBN 1-904-55505-5.

Complexities: Women in Mathematics, edited by Bettye Anne Case and Anne M. Leggett. Princeton University Press, January 2005. ISBN 0-691-11462-5.

Converging Realities: Toward a Common Philosophy of Physics and Mathematics, by Roland Omnès. Princeton University Press, November 2004. ISBN 0-691-11530-3.

The Curious Incident of the Dog in the Night-time, by Mark Haddon. Vintage, May 2004. ISBN 1-400-03271-7. (Reviewed March 2006.)

Dark Hero of the Information Age: In Search of Norbert Wiener, by Flo Conway and Jim Siegelman. Basic Books, December 2004. ISBN 0-738-20368-8.

**Decoding the Universe: How the New Science of Information Is Explaining Everything in the Cosmos, from Our Brains to Black Holes*, by Charles Seife. Viking Adult, February 2006. ISBN 0-670-03441-X.

Piero della Francesca: A Mathematician's Art, by J. V. Field. Yale University Press, August 2005. ISBN 0-300-10342-5.

Divine Proportions: Rational Trigonometry to Universal Geometry, by N. J. Wildberger. Wild Egg Books, September 2005. ISBN 0-9757492-0-X.

The Equation That Couldn't Be Solved (How Mathematical Genius Discovered the Language of Symmetry), by Mario Livio. Simon and Schuster, September 2005. ISBN 0-743-25820-7.

M. C. Escher's Legacy: A Centennial Celebration, edited by Doris Schattschneider and Michele Emmer. Springer, September 2005 (paperback edition). ISBN 3-540-20100-9.

The Essential Turing, edited by B. Jack Copeland. Oxford University Press, September 2004. ISBN 0-198-25080-0.

Experimentation in Mathematics: Computational Paths to Discovery, by Jonathan Borwein, David Bailey, and Roland Girgensohn. A K Peters, March 2004. ISBN 1-56881-136-5. (Reviewed September 2005.)

The Fermat Diary, by C. J. Mozzochi. AMS, August 2000. ISBN 0-8218-2670-0.

The Fermat Proof, by C. J. Mozzochi. Trafford Publishing, Inc., February 2004. ISBN 1-412-02203-7.

Geometry and Meaning, by Dominic Widdows. Center for the Study of Language and Information, November 2004. ISBN 1-575-86448-7.

God Created the Integers, by Stephen Hawking. Running Press, October 2005. ISBN 0-762-41922-9.

Gödel's Theorem: An Incomplete Guide to Its Use and Abuse, by Torkel Franzen. A K Peters, May 2005. ISBN 1-56881-238-8.

Graphic Discovery: A Trout in the Milk and Other Visual Adventures, by Howard Wainer. Princeton University Press, October 2004. ISBN 0-691-10301-1.

**Hiding in the Mirror: The Mysterious Allure of Extra Dimensions, from Plato to String Theory and Beyond*, by Lawrence M. Krauss. Viking Adult, October 2005. ISBN 0-670-03395-2.

Incompleteness: The Proof and Paradox of Kurt Gödel, by Rebecca Goldstein. W. W. Norton, February 2005. ISBN 0-393-05169-2. (Reviewed in this issue.)

The Infinite Book: A Short Guide to the Boundless, Timeless and Endless, by John D. Barrow. Pantheon, August 2005. ISBN 0-375-42227-7.

Introducing Game Theory and Its Applications, by Elliott Mendelson. CRC Press, July 2004. ISBN 1-584-88300-6.

János Bolyai, Euclid, and the Nature of Space, by Jeremy J. Gray. MIT Press, May 2003. ISBN 0-262-57174-9. (Reviewed October 2005.)

John Pell (1611-1685) and His Correspondence with Sir Charles Cavendish: The Mental World of an Early Modern Mathematician, by Noel Malcolm and Jacqueline Stedall. Oxford University Press, second edition, January 2005. ISBN 0-198-56484-8.

The Knot Book: An Elementary Introduction to the Mathematical Theory of Knots, Colin C. Adams. AMS, September 2004. ISBN 0-8218-3678-1. (Reviewed September 2005.)

Knots and Links, by Peter R. Cromwell. Cambridge University Press, October 2004. ISBN 0-521-83947-5.

Luck, Logic, and White Lies: The Mathematics of Games, by Jörg Bewersdorff. Translated by David Kramer. A K Peters, November 2004. ISBN 1-56881-210-8.

Saunders Mac Lane: A Mathematical Autobiography, by Saunders Mac Lane. A K Peters, May 2005. ISBN

1-56881-150-0. (Reviewed December 2005.)

**The Man Who Knew Too Much: Alan Turing and the Invention of the Computer*, by David Leavitt. Great Discoveries series, W. W. Norton, December 2005. ISBN 0-393-05236-2.

Math and the Mona Lisa: The Art and Science of Leonardo da Vinci, by Bulent Atalay. Smithsonian Books, April 2004. ISBN 1-588-34171-2.

The Math Instinct: Why You're a Mathematical Genius (Along with Lobsters, Birds, Cats, and Dogs), by Keith Devlin. Thunder's Mouth Press, March 2005. ISBN 1-56025-672-9.

Mathematical Adventures for Students and Amateurs, David F. Hayes and Tatiana Shubin, editors. Mathematical Association of America, 2004. ISBN 0-88385-548-8.

Mathematical Illustrations: A Manual of Geometry and PostScript, by Bill Casselman. Cambridge University Press, December 2004. ISBN 0-521-54788-1.

Mathematical Musings: A Collection of Quotes, edited by Dan Sonnenschein. Clarium Press, November 2005. ISBN 0-9697688-8-5.

Mathematics by Experiment: Plausible Reasoning in the 21st Century, by Jonathan Borwein and David Bailey. A K Peters, December 2003. ISBN 1-56881-211-6. (Reviewed September 2005.)

Mathematics in Nature: Modeling Patterns in the Natural World, by John A. Adam. Princeton University Press, November 2003. ISBN 0-691-11429-3. (Reviewed June/July 2005.)

MetaMath! The Quest for Omega, by Gregory Chaitin. Pantheon, October 2005. ISBN 0-375-42313-3.

R. L. Moore: Mathematician and Teacher, by John Parker. Mathematical Association of America, 2004. ISBN 0-88385-550-X.

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

Musings of the Masters: An Anthology of Miscellaneous Reflections, edited by Raymond G. Ayoub. Mathematical Association of America, June 2004. ISBN 0-88385-549-6.

New Mexico Mathematics Contest Problem Book, by Liong-shin Hahn. University of New Mexico Press, November 2005. ISBN 0-8263-3534-9.

The Newtonian Moment: Isaac Newton and the Making of Modern Culture, by Mordechai Feingold. New York Library and Oxford University Press, December 2004. ISBN 0-195-17735-5.

Numbers, the Language of Science, by Tobias Dantzig. Pi Press, fifth edition, March 2005. ISBN 0-131-85627-8.

The Oxford Murders, by Guillermo Martínez. Abacus, January 2005. ISBN 0-349-11721-7. (Reviewed November 2005.)

The Pea and the Sun: A Mathematical Paradox, by Leonard M. Wapner. A K Peters, April 2005. ISBN 1-56881-213-2.

PopCo, by Scarlett Thomas. Harvest Books, October 2005. ISBN 0-156-03137-X. (Reviewed February 2006.)

Probability Theory: The Logic of Science, by E. T. Jaynes. Edited by G. Larry Bretthorst. Cambridge University Press, April 2003. ISBN 0-521-59271-2. (Reviewed January 2006.)

Reality Conditions: Short Mathematical Fiction, by Alex Kasman. Mathematical Association of America, May 2005. ISBN 0-88385-552-6.

**Reflections: V. I. Arnold's Reminiscences*, by V. I. Arnold. Springer, April 2006. ISBN 3-540-28734-5.

The Road to Reality: A Complete Guide to the Laws of the Universe, by Roger Penrose. Knopf, February 2005. ISBN 0-679-45443-8.

Science in the Looking Glass, by E. Brian Davies. Oxford University Press, August 2003. ISBN 0-198-52543-5. (Reviewed December 2005.)

Sneaking a Look at God's Cards: Unraveling the Mysteries of Quantum Mechanics, by Giancarlo Ghirardi, translated by Gerald Malsbary. Princeton University Press, revised edition, January 2005. ISBN 0-691-12139-7.

Spaceland, by Rudy Rucker. Tor Books, June 2002. ISBN 0-765-30366-3. (Reviewed August 2005.)

Stalking the Riemann Hypothesis: The Quest to Find the Hidden Law of Prime Numbers, by Dan Rockmore. Pantheon, April 2005. ISBN 0-375-42136-X.

**The Three Body Problem*, by Catherine Shaw. Allison and Busby, March 2005. ISBN 0-749-08347-6.

A Tour through Mathematical Logic, by Robert S. Wolf. Mathematical

Association of America, January 2005. ISBN 0-88385-036-2.

The Transformation of Mathematics in the Early Mediterranean World: From Problems to Equations, by Reviel Netz. Cambridge University Press, June 2004. ISBN 0-521-82996-8.

Using the Mathematics Literature, by Kristine K. Fowler. Marcel Dekker, June 2004. ISBN 0-824-75035-7.

The Visual Mind II, edited by Michele Emmer. MIT Press, May 2005. ISBN 0-262-05076-5.

The Works of Archimedes: Translation and Commentary. Volume I: *The Two Books On the Sphere and The Cylinder*. Edited and translated by Reviel Netz. Cambridge University Press, April 2004. ISBN 0-521-66160-9. (Reviewed May 2005.)