
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.tamu.edu` in the case of the editor and `notices@ams.org` in the case of the managing editor. The fax numbers are 979-845-6028 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

November 16, 2001: Applications for MSRI Postdoctoral Fellowships and General Memberships. See <http://www.msri.org/>.

November 19, 2001: Applications for NRC-Ford Foundation Fellowships for Minorities Predoctoral Fellowship. See "Mathematics Opportunities" in this issue or <http://national-academies.org/fellowships/>.

December 1, 2001: Applications for NSF, NIH/FIC, USDA/ARS summer research program in 2002 for U.S. graduate students in Japan, Korea, and Taiwan. See <http://www.twics.com/~nsftokyo/> (select "Summer Programs"), or contact Larry H. Weber, NSF/EAP; telephone 703-292-8704; e-mail: `lweber@nsf.gov`.

December 1, 2001: Applications for AMS Centennial Fellowships. See <http://www.ams.org/employment/>

Where to Find It

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

AMS Bylaws—November 2001, p. 1205

AMS E-mail Addresses—November 2001, p. 1195

AMS Ethical Guidelines—June 1995, p. 694

AMS Officers 2000 and 2001 (Council, Executive Committee, Publications Committees, Board of Trustees)—May 2001, p. 520

AMS Officers and Committee Members—October 2001, p. 1032

Conference Board of the Mathematical Sciences—September 2001, p. 843

Information for Notices Authors—June/July 2001, p. 611

Mathematics Research Institutes Contact Information—August 2001, p. 731

National Science Board—February 2001, p. 216

New Journals for 2000—June/July 2001, p. 612

NRC Board on Mathematical Sciences and Staff—April 2001, p. 427

NRC Mathematical Sciences Education Board and Staff—May 2001, p. 517

NSF Mathematical and Physical Sciences Advisory Committee—March 2001, p. 328

Program Officers for Federal Funding Agencies—October 2001, p. 1009 (DoD, DoE); November 2001, p. 1198 (NSF)

centflyer.html, or contact Executive Director, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294; e-mail: ams@ams.org; telephone 401-455-4106.

December 3, 2001: Applications for NRC-Ford Foundation Fellowships for Minorities Dissertation Fellowship. See "Mathematics Opportunities" in this issue or <http://national-academies.org/fellowships/>.

December 15, 2001: Applications for AMS Epsilon Fund. See <http://www.ams.org/careers-edu/epsilon.html>, or contact: Professional Services Department, AMS, 201 Charles Street, Providence, RI 02904; telephone 800-321-4267, ext. 4105; e-mail: prof-serv@ams.org.

December 31, 2001: Nominations for NSF Alan T. Waterman Award. Telephone 703-292-8096 or e-mail: Susan Fannoney, sfannone@nsf.gov.

December 31, 2001: Submissions for undergraduate paper contest in *Cryptologia*. See <http://www.dean.usma.edu/math/resource/pubs/crypto/index.htm>.

January 1, 2002: Applications for Chinese Mathematical Society grants for ICM 2002. See http://www.icm2002.org.cn/F/F_Europe.htm.

January 7, 2002: Applications for NRC-Ford Foundation Fellowships for Minorities Postdoctoral Fellowship. See "Mathematics Opportunities" in this issue or <http://national-academies.org/fellowships/>.

January 10, 2002: Applications for AAUW Educational Foundation Fellowships and Grants. See <http://www.aauw.org/3000/fdnfelgra/selectprofbd.html>.

January 15, 2002: Applications for AMS-AAAS Mass Media Fellowships. See "Mathematics Opportunities" in this issue or <http://ehr.aaas.org/ehr/>.

January 15, April 15, August 15, 2002: Applications for National Research Council Research Associateship Programs. See "Mathematics Opportunities" in this issue or <http://www4.nationalacademies.org/pga/rap.nsf/>.

January 16, 2002: Applications for National Defense Science and Engineering Graduate Fellowships. See

"Mathematics Opportunities" in this issue or <http://www.asee.org/ndseg/html/preface.htm>.

January 21, 2002: Applications for AWM Workshop for Women Graduate Students and Postdocs. See <http://www.awm-math.org/>.

January 31, 2002: Applications for postdoctoral fellowships at the Institut Mittag-Leffler. See <http://www.ml.kva.se/>.

January 31, 2002: Applications for IMU travel grants for ICM 2002. See <http://elib.zib.de/IMU/>.

February 1, May 1, October 1, 2002: Applications for NSF/AWM Travel Grants for Women. See <http://www.awm-math.org/travelgrants.html>; telephone 301-405-7892; e-mail: awm@math.umd.edu.

February 1, 2002: Applications for NSF/AWM Mentoring Travel Grants. See <http://www.awm-math.org/travelgrants.html>; telephone 301-405-7892; e-mail: awm@math.umd.edu.

March 1, 2002: Applications for EDGE Summer Program. See "Mathematics Opportunities" in this issue or <http://www.brynmawr.edu/Acads/Math/edge/edge.html>.

March 1, 2002: Nominations for Third World Academy of Sciences (TWAS) Awards in Basic Sciences. See http://www.ictp.trieste.it/~twas/Awards_Info.html.

May 1, 2002: Nominations for Lobachevskii Medal. See "Mathematics Opportunities" in this issue or <http://www.ksu.ru/lobmed/>.

May 15, 2002: Applications for fall semester of Math in Moscow and for AMS scholarships. See "Mathematics Opportunities" in this issue.

October 15, 2002: Applications for spring semester of Math in Moscow and for AMS scholarships. See "Mathematics Opportunities" in this issue.

Book List

The Book List highlights books that have mathematical themes and hold appeal for a wide audience, including mathematicians, students, and a significant portion of 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 the managing editor, e-mail: notices@ams.org.

Battle of Wits: The Complete Story of Codebreaking in World War II, by Stephen Budiansky. Free Press, October 2000. ISBN 0-684-85932-7.

The Bit and the Pendulum: How the New Physics of Information Is Revolutionizing Science, by Tom Siegfried. John Wiley & Sons, February 2000. ISBN 0-47132-174-5.

The Book of Nothing: Vacuums, Voids, and the Latest Ideas about the Origins of the Universe, by John D. Barrow. Pantheon Books, April 2001. ISBN 0-375-42099-1.

The Brain: Unraveling the Mystery of How It Works (The Neural Network Process), by Thomas L. Saaty. RWS Publications, 2000. ISBN 1-888603-02-X.

Calculated Bets: Computers, Gambling, and Mathematical Modeling to Win, by Steven S. Skiena. Cambridge University Press, September 2001. ISBN 0-521-00962-6.

Chaotic Elections! A Mathematician Looks at Voting, by Donald G. Saari. AMS, April 2001. ISBN 0-8218-2847-9.

The Colossal Book of Mathematics: Classic Puzzles, Paradoxes, and Problems, by Martin Gardner. W.W. Norton & Company, August 2001. ISBN 0-393-02023-1.

Computers Ltd.: What They Really Can't Do, by David Harel. Oxford University Press, November 2000. ISBN 0-198-50555-8.

A Concise History of Mathematics, by Dirk J. Struik. Dover Publications, 1987. ISBN 0-486-60255-9. (Reviewed June/July 2001.)

Conned Again, Watson! Cautionary Tales of Logic, Math, and Probability, by Colin Bruce. Perseus Publishing, January 2001. ISBN 0-7382-0345-9.

* *Conquering Statistics: Numbers without the Crunch*, by Jefferson Hane Weaver. Perseus, paperback edition, August 2001. ISBN 0-732-820495-1.

Creators of Mathematics: The Irish Connection, by Ken Houston. University College Dublin Press, September 2000. ISBN 1-900-62149-5.

The Crest of the Peacock: The Non-European Roots of Mathematics, by George Gheverghese Joseph. Princeton University Press, October 2000 (new edition). ISBN 0-691-00659-8.

Crypto: How the Code Rebels Beat the Government—Saving Privacy in the Digital Age, by Steven Levy. Viking Press, January 2001. ISBN 0-67085-950-8.

Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists, by Joel Best. University of California Press, May 2001. ISBN 0-520-21978-3.

The Difference Engine: Charles Babbage and the Quest to Build the First Computer, by Doron Swade. Viking, September 2001. ISBN 0-670-91020-1.

Divine Harmony: The Life and Teachings of Pythagoras, by John Strohmeier and Peter Westbrook. Berkeley Hills Books, November 1999. ISBN 0-965-37745-8.

* *The Dream Machine: J. C. R. Licklider and the Revolution That Made Computing Personal*, by M. Mitchell Waldrop. Viking, 2001. ISBN 0-670-89976-3.

Duelling Idiots and Other Probability Puzzlers, by Paul J. Nahin. Princeton University Press, October 2000. ISBN 0-691-00979-1.

Euclid's Window: The Story of Geometry from Parallel Lines to Hyperspace, by Leonard Mlodinow. Free Press, April 2001. ISBN 0-684-86523-8.

Exploring Randomness, by Gregory J. Chaitin. Springer, December 2000. ISBN 1-852-33-417-7. (Reviewed October 2001.)

Finite vs. Infinite, Contributions to an Eternal Dilemma, Cristian S. Calude and Gheorghe Paun, editors. Springer, March 2000. ISBN 1-852-33251-4.

Flatterland: Like Flatland, Only More So, by Ian Stewart. Perseus Publishing, May 2001. ISBN 0-7382-0442-0.

The Fractal Murders, by Mark Cohen. E-book published by Southern Cross Review, 2001. World Wide Web: www.southerncrossreview.org.

Gödel: A Life of Logic, by John L. Casti and Werner DePauli. Perseus, August 2000. ISBN 0-7382-0274-6. (Reviewed September 2001.)

The Hilbert Challenge, by Jeremy J. Gray. Oxford University Press, 2000. ISBN 0-198-50651-1.

The Hole in the Universe: How Scientists Peered over the Edge of Emptiness and Found Everything, by K. C. Cole. Harcourt Brace, January 2001. ISBN 0-151-00398-X.

How the Other Half Thinks: Adventures in Mathematical Reasoning, by Sherman Stein. McGraw-Hill, July 2001. ISBN 0-071-37339-X.

How to Solve It: Modern Heuristics, by Zbigniew Michalewicz and David B. Fogel. Springer, December 1999. ISBN 3-540-66061-5.

In Code: A Mathematical Journey, by Sarah Flannery and David Flannery. Workman Publishing, May 2001. ISBN 0-761-12384-9.

Logical Dilemmas: The Life and Work of Kurt Gödel, by John Dawson. A K Peters, December 1997. ISBN 1-56881-025-3. (Reviewed September 2001.)

The Math Gene: How Mathematical Thinking Evolved and Why Numbers Are Like Gossip, by Keith Devlin. Basic Books, August 2000. ISBN 0-465-01618-9. (Reviewed February 2001.)

* *Mathematics and the Roots of Post-modern Thought*, by Vladimir Tasic. Oxford University Press, 2001. ISBN 0-195-13967-4.

Mathematics As Sign: Writing, Imagining, Counting, by Brian Rotman. Stanford University Press, September 2000. ISBN 0-804-73684-7.

Mathematics: Frontiers and Perspectives, V. Arnold, M. Atiyah, P. Lax, and B. Mazur, editors. AMS, December 1999. ISBN 0-8218-2697-2.

Mathematics Galore: Masterclasses, Workshops, and Team Projects in Mathematics and Its Applications, by C. J. Budd and C. J. Sangwin. Oxford University Press, June 2001. ISBN 0-198-50769-0 (hardcover), 0-198-50770-4 (paperback).

* *A New Kind of Science*, by Stephen Wolfram. Wolfram Media, Inc., October 2001. ISBN 1-579-55008-8.

Newton's Gift: How Sir Isaac Newton Unlocked the System of the World, by David Berlinski. Free Press, October 2000. ISBN 0-684-84392-7.

Newton's Tyranny: The Suppressed Scientific Discoveries of John Flamsteed and Stephen Gray, by David H. Clark and Stephen P. H. Clark. W. H.

Freeman, October 2000. ISBN 0-716-74215-2.

Niels Hendrik Abel and His Times: Called Too Soon by Flames Afar, by Arild Stubhaug, translated by R. Daly. Springer, May 2000. ISBN 3-540-66834-9.

Number: From Ahmes to Cantor, by Midhat Gazalé. Princeton University Press, March 2000. ISBN 0-691-00515-X. (Reviewed August 2001.)

The Parrot's Theorem, by Denis Guedj. St. Martin's Press, September 2001. ISBN 0-312-28055-6. (Reviewed March 2001.)

Proofs from THE BOOK, by M. Aigner and G. M. Ziegler. Revised and expanded second edition, Springer, January 2001. ISBN 3-540-67865-4. (First edition reviewed August 1999.)

Ptolemy's Geography, translated by J. Lennart Berggren and Alexander Jones. Princeton University Press, November 2000. ISBN 0-691-01042-0.

The Pursuit of Perfect Packing, by Tomaso Aste and Denis Weaire. Institute of Physics Publishing, July 2000. ISBN 0-750-30648-3.

Radical Equations: Math Literacy and Civil Rights, by Robert P. Moses and Charles E. Cobb Jr. Beacon Press, February 2001. ISBN 0-807-03126-7.

Sacred Geometry, by Miranda Lundy. Walker & Company, April 2001. ISBN 0-802-71382-3.

The Search for Mathematical Roots, 1870-1940: Logics, Set Theories, and the Foundations of Mathematics from Cantor through Russell to Gödel, by I. Grattan-Guinness. Princeton University Press, February 2001. ISBN 0-691-0587-1.

The Story of Mathematics, by Richard Mankiewicz. Princeton University Press, February 2001. ISBN 0-691-08808-X.

Triangle of Thoughts, by Alain Connes, André Lichnerowicz, and Marcel Paul Schützenberger. AMS, July 2001. ISBN 0-8218-2614-X.

The Universal Computer: The Road from Leibniz to Turing, by Martin Davis. W.W. Norton & Company, October 2000. ISBN 0-393-04785-7. (Reviewed May 2001.)

The Universal History of Computing: From the Abacus to the Quantum Computer, by Georges Ifrah; translated from the French and with notes by

E. F. Harding, assisted by Sophie Wood, Ian Monk, Elizabeth Clegg, and Guido Waldman. John Wiley & Sons, November 2000. ISBN 0-471-39671-0.

The Universal History of Numbers: From Prehistory to the Invention of the Computer, by Georges Ifrah; translated from the French by David Bellos, E. F. Harding, Sophie Wood, and Ian Monk. John Wiley & Sons, December 1999. ISBN 0-471-37568-3.

The Unknowable, by Gregory J. Chaitin. Springer, August 1999. ISBN 9-814-02172-5. (Reviewed October 2001.)

What Is Mathematics? An Elementary Approach to Ideas and Methods, by Richard Courant and Herbert Robbins; second edition, revised by Ian Stewart. Oxford University Press, August 1996. ISBN 0-195-10519-2. (Reviewed in this issue.)

Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being, by George Lakoff and Rafael Núñez. Basic Books, October 2000. ISBN 0-465-03770-4. (Reviewed November 2001.)

White Light, by Rudy Rucker. Four Walls Eight Windows, April 2001. ISBN 1-56858-198-X.

Women Becoming Mathematicians: Creating a Professional Identity in Post-World War II America, by Margaret A. M. Murray. MIT Press, September 2000. ISBN 0-262-13369-5. (Reviewed August 2001.)

*Added to "Book List" since the list's last appearance.