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

September 1, 2001: Applications for AWM Workshops for Women Graduate Students and Postdocs. See http://www.awm-math.org/, or contact Workshop Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461; telephone 301-405-7892; e-mail: awm@math.umd.edu.

September 15, 2001: Nominations for Alfred P. Sloan Research Fellowships. Contact Sloan Research Fellowships, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, NY 10111; or see http://www.sloan.org/.

September 28, 2001: Applications for MSRI Research Professorships. See "Mathematics Opportunities" in this issue.

Where to Find It

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

AMS Bylaws—*November 1999, p. 1252*

AMS e-Mail Addresses—*November 2000, p. 1288*

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 2000, p. 1291 (NSF)*

October 1, 2001: Nominations for the Louise Hay and Alice T. Schafer awards of the AWM. Contact Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461; telephone 301-405-7892; e-mail: awm@math.umd.edu; World Wide Web http://www.awm-math.org/.

October 1, 2001: Nominations for the Emanuel and Carol Parzen Prize. Submit nominations to J. H. Matis, Department of Statistics, Texas A&M University, College Station, TX 77873-3143.

October 1, 2001: 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.

October 1, 2001: Proposals for 2003 5-day workshops and summer schools for the Banff International Research Station (BIRS). See "Mathematics Opportunities" in this issue.

October 5, 2001: Proposals for the NSF Competition in Mathematical Biology. See "Mathematics Opportunities" in this issue.

October 15, 2001: Applications for NSA Grant and Sabbatical Programs. See http://www.nsa.gov/programs/msp/grants.html, or write to: NSA Mathematical Sciences Program, National Security Agency, ATTN:R51A, Ft. George G. Meade, MD 20755-6000.

October 17, 2001: Applications for NSF Postdoctoral Research Fellowships. See http://www.fastlane.nsf.gov/.

October 22, 2001: Applications for NSF International Research Fellow Awards. See "Mathematics Opportunities" in this issue.

October 31, 2001: Applications for AMS Travel Grants for ICM 2002. See http://www.ams.org/careers-edu/icmapp.html; e-mail: ICM02@ams.org; telephone 800-321-4267, ext. 4105, or 401-455-4105.

November 1, 2001: Proposals for ONR Young Investigator Program. See "Mathematics Opportunities" in this issue.

November 1, 2001: Applications for Fulbright Scholar international education and academic administrator seminars. Contact the Council for International Exchange of Scholars (CIES), 3007 Tilden Street, NW, Suite 5L, Washington, DC 20008-3009; telephone 202-686-7877; World Wide Web http://www.cies.org/cies/pr_competit_02.htm.

November 16, 2001: Applications for MSRI Postdoctoral Fellowships and General Memberships. See "Mathematics Opportunities" in this issue.

December 15, 2001: Applications for AMS Epsilon Fund. See "Mathematics Opportunities" in this issue.

December 31, 2001: Nominations for NSF Alan T. Waterman Award. See "Mathematics Opportunities" in this issue.

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 grants for ICM 2002, from the Chinese Mathematical Society and the ICM 2002 Organizing Committee. See "Mathematics Opportunities" in this issue.

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: Nominations for Third World Academy of Sciences (TWAS) Awards in Basic Sciences. See "Mathematics Opportunities" in this issue.

DoD Mathematics Staff

Five agencies of the Department of Defense fund research in the mathematical sciences. The names, addresses, and telephone numbers of the pertinent staff members are listed below.

Defense Advanced Research Projects Agency
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Arlington, VA 22203-1714
703-526-6630
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Air Force Office of Scientific Research
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AFOSR/NM
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Discrete Mathematics and Computer Science
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Probability and Statistics
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National Security Agency
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Attn: R51A, Suite 6557
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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.

Angles of Reflection: Logic and a Mother's Love, by Joan L. Richards. W. H. Freeman, May 2000. ISBN 0-716-73831-7.

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.

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.

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.

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 Dots and Boxes Game, by Elwyn Berlekamp. A K Peters, July 2000. ISBN 1-568-81129-2.

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

Education of a Mathematician, by Philip J. Davis. A K Peters, August 2000. ISBN 1-568-81116-0. (Reviewed January 2001.)

Einstein in Love: A Scientific Romance, by Dennis Overbye. Viking Press, October 2000. ISBN 0-670-89430-3.

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 in this issue.)

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/.

Geometry from Africa: Mathematical and Educational Explorations, by Paulus Gerdes. Mathematical Association of America, April 1999. ISBN 0-88385-715-4.

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

Gödel Meets Einstein: Time Travel in the Gödel Universe, by Palle Yourgrau. Open Court, November 1999. ISBN 0-812-69408-2.

Hex Strategy: Making the Right Connections, by Cameron Browne. A K Peters, May 2000. ISBN 1-568-81117-9.

** 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.

The Kingdom of Infinite Number: A Field Guide, by Bryan Bunch. W. H.

Freeman, January 2000. ISBN 0-716-73388-9.

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 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).

My Numbers, My Friends: Popular Lectures on Number Theory, by Paulo Ribenboim. Springer, February 2000. ISBN 0-387-98911-0.

The Mystery of the Aleph: Mathematics, the Kabbalah, and the Search for Infinity, by Amir D. Aczel. Four Walls Eight Windows, November 2000. ISBN 1-568-58105-X.

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. Weidenfeld & Nicolson, June 2000. ISBN 0-297-64578-1. (To be published in the U.S. by 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.

Surfing through Hyperspace: Understanding Higher Universes in Six Easy Lessons, by Clifford A. Pickover. Oxford University Press, September 1999. ISBN 0-195-13006-5.

The Symbolic Universe: Geometry and Physics 1890–1930, edited by Jeremy Gray. Oxford University Press, September 1999. ISBN 0-198-50088-2.

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

Two Millennia of Mathematics: From Archimedes to Gauss, by George M. Phillips. Springer, July 2000. ISBN 0-387-95022-2.

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 in this issue.)

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.

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.

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.)

Wonders of Numbers: Adventures in Math, Mind, and Meaning, by Clifford A. Pickover. Oxford University Press, September 2000. ISBN 0-195-13342-0.