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# 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](mailto:notices@math.tamu.edu) in the case of the editor and [notices@ams.org](mailto: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

**October 9, 2002:** Full proposals for NSF Distinguished International Postdoctoral Research Fellowships. Contact Lynne Walling, Program Director, Division of Mathematical Sciences, Room 1025, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230; telephone 703-292-8104; email: [lwalling@nsf.gov](mailto:lwalling@nsf.gov); or see <http://www.nsf.gov/pubs/2001/nsf01154/nsf01154.txt/>.

**October 15, 2002:** Proposals for NSA grant and sabbatical programs. See <http://www.nsa.gov/programs/msp/grants.html>; telephone: 301-688-0400; email: [msp@math.umbc.edu](mailto:msp@math.umbc.edu); postal address: Mathematical Sciences Program, National Security Agency, ATTN: R51A, Suite 6557, Ft. George G. Meade, MD 20755-6557.

**October 15, 2002:** Applications for spring semester of Math in Moscow and for AMS scholarships. See <http://www.mccme.ru/>

## 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 Email Addresses**—November 2002, p. 1275

**AMS Ethical Guidelines**—June/July 2002, p. 706

**AMS Officers 2000 and 2001 (Council, Executive Committee, Publications Committees, Board of Trustees)**—June/July 2002, p. 705

**AMS Officers and Committee Members**—October 2002, p. 1108

**Backlog of Mathematics Research Journals**—September 2002, p. 963

**Conference Board of the Mathematical Sciences**—September 2002, p. 955

**Information for Notices Authors**—June/July 2002, p. 697

**Mathematics Research Institutes Contact Information**—August 2002, p. 828

**National Science Board**—February 2002, p. 237

**New Journals for 2001**—June/July 2002, p. 698

**NRC Board on Mathematical Sciences and Staff**—April 2002, p. 492

**NRC Mathematical Sciences Education Board and Staff**—May 2002, p. 583

**NSF Mathematical and Physical Sciences Advisory Committee**—March 2002, p. 345

**Program Officers for Federal Funding Agencies**—October 2002, p. 1103 (DoD, DoE); November 2002, p. 1278 (NSF Education Program Officers)

mathinmoscow/; or contact Math in Moscow, P. O. Box 524, Wynnewood, PA 19096; fax: +7095-291-65-01; email: mim@mccme.ru. For information about and application forms for the AMS scholarships, see <http://www.ams.org/careers-edu/mimoscow.html>; or contact Math in Moscow Program, Professional Services Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904; email: prof-serv@ams.org.

**October 18, 2002:** Applications for NSF Postdoctoral Research Fellowships. See the NSF website at <http://www.fastlane.nsf.gov/d11/D11Menu.htm>.

**November 1, 2002:** Proposals for ONR Young Investigator Program. See the ONR website, [http://www.onr.navy.mil/sci\\_tech/industrial/yip\\_announce.htm](http://www.onr.navy.mil/sci_tech/industrial/yip_announce.htm).

**November 1, 2002:** Entries for AWM essay contest. See <http://www.awm-math.org/biographies/contest.html>, or contact Victoria Howle, email: vhowle@sandia.gov.

**November 1, 2002:** Applications for NSF International Research Fellow Awards. Contact Susan Parris, 703-292-8711, email: sparris@nsf.gov; or visit the website <http://www.nsf.gov/sbe/int/fellows/start.htm>.

**November 7, 2002:** Applications for NSF Graduate Fellowships. See the website <http://www.orau.org/nsf/nsffel.htm>, telephone (toll-free) 866-353-0905, email: nsfgrfp@orau.gov.

**November 15, 2002:** Applications for Postdoctoral Fellowships and General Memberships at MSRI. See <http://www.msri.org/>; or contact MSRI, 1000 Centennial Drive, Berkeley, CA 94720-5070.

**December 1, 2002:** Applications for AMS Centennial Fellowships. See <http://www.ams.org/employment/centflyer.html>, or contact: Professional Services Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904; telephone 401-455-4107; email: prof-serv@ams.org.

**December 1, 2002:** Submissions for Sunyer i Balaguer Prize. Contact Centre de Recerca Matemàtica,

Fundació Ferran Sunyer i Balaguer, Apartat 50, E-08193 Bellaterra, Spain. World Wide Web: <http://www.crm.es/info/ffsb.htm>; email: crm@crm.es.

**December 1, 2002:** Applications for NSF/NIH East Asia and Pacific Program. See “Mathematics Opportunities” in this issue.

**December 16, 2002:** 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; email: prof-serv@ams.org.

**December 31, 2002:** Nominations for Alan T. Waterman Award. Contact Susan E. Fannoney, telephone: 703-292-8096, email: sfannone@nsf.gov.

**January 10, 2003:** Applications for AAUW Selected Professions Fellowships. See “Mathematics Opportunities” in this issue.

**January 24, 2003:** Applications for AWM Workshop for Women Graduate Students and Postdocs. See “Mathematics Opportunities” in this issue.

**January 31, 2003:** Applications for postdoctoral fellowships at Institut Mittag-Leffler. See “Mathematics Opportunities” in this issue.

**February 1, 2003:** Applications for NSF/AWM Travel Grants for Women. See <http://www.awm-math.org/travelgrants.html>, telephone: 301-405-7892, email: awm@math.umd.edu.

**March 1, 2003:** Nominations for Third World Academy of Science Prizes. See the website [http://www.ictp.trieste.it/~twas/twas\\_prizes.html](http://www.ictp.trieste.it/~twas/twas_prizes.html).

**April 18, 2003:** Full proposals for NSF IGERT program. See the website <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf02145/>.

**May 1, 2003:** Applications for NSF/AWM Travel Grants for Women. See <http://www.awm-math.org/travelgrants.html>, telephone: 301-405-7892, email: awm@math.umd.edu.

**May 15, 2003:** Applications for fall semester of Math in Moscow and for AMS scholarships. See <http://www.mccme.ru/mathinmoscow/>; or contact Math in Moscow, P. O. Box 524, Wynnewood, PA 19096; fax:

+7095-291-65-01; email: mim@mccme.ru. For information about and application forms for the AMS scholarships, see <http://www.ams.org/careers-edu/mimoscow.html>; or contact Math in Moscow Program, Professional Services Department, American Mathematical Society, 201 Charles Street, Providence RI 02904; email: prof-serv@ams.org.

**June 30, 2003:** Nominations for the Fermat Prize for Mathematics Research. See “Mathematics Opportunities” in this issue.

### NSF Mathematics Education Staff

The Directorate for Education and Human Resources (EHR) of the National Science Foundation (NSF) sponsors a range of programs that support educational projects in mathematics, science, and engineering. Listed below are the names, telephone numbers, and email addresses of those EHR program officers whose field is in the mathematical sciences or mathematics education. These individuals can provide information about the programs they oversee, as well as information about other EHR programs of interest to mathematicians. The mailing address is: Directorate for Education and Human Resources, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. The World Wide Web address is <http://www.nsf.gov/ehr/>.

### Division of Elementary, Secondary, and Informal Education

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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 notices-booklist@ams.org.*

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

*The Algorithmic Beauty of Seaweeds, Sponges and Corals*, by Jap Kaandorp and Janet Kübler. Springer-Verlag, January 2001. ISBN 3-540-67700-3.

\* *The Annotated Flatland: A Romance of Many Dimensions*, Edwin A. Abbott; introduction and notes by Ian Stewart. Perseus Publishing, November 2001. ISBN 0-7382-0541-9. (Reviewed in this issue.)

*The Bit and the Pendulum: How the New Physics of Information Is Revolutionizing Science*, by Tom Siegfried. John Wiley & Sons, February 2000. ISBN 0-471-39974-4. (Reviewed August 2002.)

*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. (Reviewed June/July 2002.)

*Codes and Ciphers: Julius Caesar, the Enigma, and the Internet*, by Robert Churchhouse. Cambridge University Press, January 2002. ISBN 0-521-81054-X.

*The Colossal Book of Mathematics: Classic Puzzles, Paradoxes, and Problems*, by Martin Gardner. W. W. Norton & Company, August 2001. ISBN 0-393-02023-1. (Reviewed October 2002.)

*Conned Again, Watson! Cautionary Tales of Logic, Math, and Probability*, by Colin Bruce. Perseus Publishing, January 2001. ISBN 0-7382-0345-9. (Reviewed in this issue.)

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

*Conversations with a Mathematician: Math, Art, Science, and the Limits of Reason*, by Gregory J. Chaitin. Springer, November 2001. ISBN 1-85233-549-1.

*Curve Ball: Baseball, Statistics, and the Rules of Chance in the Game*, by Jim Albert and Jay Bennett. Copernicus-Springer-Verlag, July 2001. ISBN 0-387-98816-5.

*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.

*Does God Play Dice? The New Mathematics of Chaos*, by Ian Stewart. Blackwell, revised second edition, January 2002. ISBN 0-631-23251-6.

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

\* *Entanglement: The Greatest Mystery in Physics*, by Amir D. Aczel. Four Walls Eight Windows, October 2002. ISBN 1-56858-232-3.

*The Essential John Nash*, Harold Kuhn and Sylvia Nasar, editors. Princeton University Press, December 2001. ISBN 0-691-09527-2.

*Euclid's Window: The Story of Geometry from Parallel Lines to Hyperspace*, by Leonard Mlodinow. Free Press, April 2001. ISBN 0-684-86523-8. (Reviewed May 2002.)

*Flatterland: Like Flatland, Only More So*, by Ian Stewart. Perseus Publishing, April 2001. ISBN 0-7382-0675-X. (Reviewed April 2002.)

*Fooled by Randomness: The Hidden Role of Chance in the Markets and Life*, by Nassim Nicholas Taleb. Texere, October 2001. ISBN 1-587-99071-7.

*The Fractal Murders*, by Mark Cohen. Muddy Gap Press, May 2002. 0-9718986-0-X.

*Fragments of Infinity: A Kaleidoscope of Math and Art*, by Ivars Peterson. John Wiley & Sons, October 2001. ISBN 0-471-16558-1. (Reviewed October 2002.)

*A Gardner's Workout: Training the Mind and Entertaining the Spirit*, by Martin Gardner. A K Peters, June 2001. ISBN 1-56881-120-9.

*Geometry: Our Cultural History*, by Audun Holme. Springer, April 2002. ISBN 3-540-41949-7.

*Gödel's Proof*, by Ernest Nagel and James R. Newman. New York University Press, revised edition, February 2002. ISBN 0-8147-5816-9.

*Go To: The Story of the Math Majors, Bridge Players, Engineers, Chess Wizards, Scientists and Iconoclasts Who Were the Hero Programmers of the Software Revolution*, by Steve Lohr. Basic Books, October 2001. ISBN 0-465-04225-2.

*The Hilbert Challenge*, by Jeremy J. Gray. Oxford University Press, December 2000. ISBN 0-198-50651-1. (Reviewed September 2002.)

*The Honors Class*, by Benjamin Yandell. A K Peters, December 2001. ISBN 1-56881-141-1. (Reviewed September 2002.)

*How the Other Half Thinks: Adventures in Mathematical Reasoning*, by Sherman Stein. McGraw-Hill, July 2001. ISBN 0-07-137339-X. (Reviewed September 2002.)

*How the Universe Got Its Spots*, by Janna Levin. Princeton University Press, April 2002. ISBN 0-691-09657-0.

*It Must Be Beautiful: Great Equations of Modern Science*, Graham Farmelo, editor. Granta Books, February 2002. ISBN 1-862-07479-8.

*The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century*, by David Salsburg. W. H. Freeman & Co, April 2001. ISBN 0-716-74106-7.

*Lebesgue's Theory of Integration: Its Origins and Development*, by Thomas Hawkins. AMS, September 2001. ISBN 0-8218-2963-7.

*The Mathematical Explorer*, by Stan Wagon. Electronic book, Wolfram Research, Inc., 2001. (Reviewed June/July 2002.)

*Mathematical Vistas*, by Peter Hilton, Derek Holton, and Jean Pedersen. Springer-Verlag, January 2002. ISBN 0-387-95064-8.

*A Mathematician Grappling with His Century: The Autobiography of Laurent Schwartz*, translated from the French by L. Schneps. Birkhäuser, 2001. ISBN 3-7643-6052-6.

*The Mathematician Sophus Lie: It Was the Audacity of My Thinking*, by

Arild Stubhaug. Springer, 2002. ISBN 3-540-42137-8.

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

*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 0-19-850769-0 (hardcover), 0-19-850770-4 (paperback). (Reviewed September 2002.)

*Mathematics in a Postmodern Age: A Christian Perspective*, Russell W. Howell and W. James Bradley, editors. Wm. B. Eerdmans Publishing Company, May 2001. ISBN 0-802-84910-5.

*The Measure of the World*, by Denis Guedj. University of Chicago Press, October 2001. ISBN 0-226-31030-2.

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

*A New Kind of Science*, by Stephen Wolfram. Wolfram Media, Inc., May 2002. ISBN 1-579-55008-8.

*Niels Henrik Abel and His Times: Called Too Soon by Flames Afar*, by Arild Stubhaug; translated by R. Daly. Springer-Verlag, May 2000. ISBN 3-540-66834-9. (Reviewed August 2002.)

*Political Numeracy: Mathematical Perspectives on Our Chaotic Constitution*, by Michael Meyerson. W. W. Norton & Company, March 2002. ISBN 0-393-04172-7.

*Puzzlers' Tribute: A Feast for the Mind*, Tom Rodgers and David Wolfe, editors. A K Peters, December 2001. ISBN 1-56881-121-7.

*The Quest for the Quantum Computer*, by Julian Brown. Touchstone Books, August 2001. ISBN 0-684-87004-5.

*Radical Equations: Math Literacy and Civil Rights*, by Robert P. Moses and Charles E. Cobb Jr. Beacon Press, February 2001. ISBN 0-8070-3126-7. (Reviewed March 2002.)

*The Rainbow Bridge: Rainbows in Art, Myth, and Science*, by Raymond L. Lee Jr. and Alistair B. Fraser. Pennsylvania State University Press and SPIE Press, 2001. ISBN 0-271-01977-8.

*The Riddle of the Compass*, by Amir Aczel. Harcourt Brace, August 2001. ISBN 0-151-00506-0.

*Science and an African Logic*, by Helen Verran. University of Chicago Press, January 2002. ISBN 0-226-85389-6 (cloth), 0-226-85391-8 (paper).

*The Science of Conjecture: Evidence and Probability before Pascal*, by James Franklin. Johns Hopkins University Press, June 2001. ISBN 0-8018-6569-7.

*Signs of Life: How Complexity Permeates Biology*, by Richard Solé and Brian Goodwin. Basic Books, January 2001. ISBN 0-465-01927-7.

*Spaceland*, by Rudy Rucker. Tor Books, June 2002. ISBN 0-765-30366-3.

*Statisticians of the Centuries*, edited by C. C. Heyde and E. Seneta. Springer, September 2001. ISBN 0-387-953283-7.

*The Story of Mathematics*, by Richard Mankiewicz. Princeton University Press, February 2001. ISBN 0-691-08808-X. (Reviewed April 2002.)

*Such Silver Currents: The Story of William and Lucy Clifford, 1845-1929*, by M. Chisholm. Lutterworth Press, March 2002. ISBN 0-7188-3017-2.

*Things a Computer Scientist Rarely Talks About*, by Donald Knuth. Center for the Study of Language and Information, July 2001. ISBN 1-57586-327-8.

*Thinks*, by David Lodge. Viking Press, May 2001. ISBN 0-670-89984-4.

*Triangle of Thoughts*, by Alain Connes, André Lichnerowicz, and Marcel Paul Schützenberger. AMS, July 2001. ISBN 0-8218-2624-X. (Reviewed March 2002.)

*Turing and the Universal Machine: The Making of the Modern Computer*, by Jon Agar. Totem Books, June 2001. ISBN 1-840-46250-7.

*Understanding Mathematics for Aircraft Navigation*, by James S. Wolper. McGraw-Hill, May 2001. ISBN 0-07-137572-4.

*The Unfinished Revolution: Human-Centered Computers and What They Can Do for Us*, by Michael L. Dertouzos. Harperbusiness, January 2001. ISBN 0-066-62067-8.

*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, Sophie Wood, Ian Monk, Elizabeth Clegg, and Guido Waldman. John Wiley & Sons, November 2000. ISBN 0-471-39671-0. (Reviewed in two

## Reference and Book List

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parts, January 2002 and February 2002.)

*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. (Reviewed in two parts, January 2002 and February 2002.)

*The Universe in a Nutshell*, by Stephen Hawking. Bantam Books, November 2001. ISBN 0-553-80202-X. (Reviewed May 2002.)

*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 December 2001.)

*What Shape Is a Snowflake?*, by Ian Stewart. W. H. Freeman & Co., November 2001. ISBN 0-716-74794-4.

*The Zen of Magic Squares, Circles, and Stars: An Exhibition of Surprising Structures across Dimensions*, by Clifford A. Pickover. Princeton University Press, January 2001. ISBN 0-691-07041-5.