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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

**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](mailto:prof-serv@ams.org).

**December 31, 2002:** Nominations for Alan T. Waterman Award. Contact Susan E. Fannoney, telephone: 703-

292-8096, or email: [sfannone@nsf.gov](mailto:sfannone@nsf.gov).

**January 2, 2003:** Applications for postdoctoral positions at The Fields Institute. See <http://www.fields.utoronto.ca/proposals/postdoc.html>.

**January 6, 2003:** Applications for National Defense Science and Engineering Graduate Fellowships. Contact the NDSEG Fellowship Program, c/o American Society for Engineering Education, 1818 N Street, N.W. #600,

## 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**—January 2003, p. 64

**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); December 2002, p. 1406 (DMS Program Officers)

Washington, DC 20036; telephone: 202-331-3516; fax: 202-265-8504; email: [ndseg@asee.org](mailto:ndseg@asee.org). See <http://www.asee.org/ndseg/html/preface.htm>.

**January 8, 2003:** Applications for NRC-Ford Foundation Postdoctoral Fellowship Program. See <http://national-academies.org/fellowships/>, or contact Ford Foundation Fellowships/TJ 2041, National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418; telephone: 202-334-2872; email: [infofell@nas.edu](mailto:infofell@nas.edu).

**January 10, 2003:** Applications for AAUW Selected Professions Fellowships. See <http://www.aauw.org/3000/fdnfelgra/selectprof.html> or contact the AAUW Educational Foundation, 1111 Sixteenth St. N.W., Washington, DC 20036; telephone: 800-326-2289 (AAUW); fax: 202-872-1425; email: [info@aauw.org](mailto:info@aauw.org).

**January 15, 2003:** Applications for AMS-AAAS Mass Media Fellowships. See <http://ehrweb.aaas.org/massmedia.htm>, or contact Katrina Malloy, Program Coordinator, AAAS Mass Media Science and Engineering Fellows Program, 1200 New York Avenue, NW, Washington, DC 20005; telephone: 202-326-6760; fax: 202-371-9849; or the AMS Washington Office, 1527 Eighteenth Street, NW, Washington, DC 20036; telephone: 202-588-1100; fax: 202-588-1853; email: [amsdc@ams.org](mailto:amsdc@ams.org).

**January 15, 2003:** Applications for National Research Council Research Associateship Program. See <http://www4.nationalacademies.org/pga/rap.nsf/>, or contact the National Research Council, Associateship Programs (TJ 2114), 2101 Constitution Avenue, NW, Washington, DC 20418; telephone: 202-334-2760; fax: 202-334-2759; email: [rap@nas.edu](mailto:rap@nas.edu).

**January 24, 2003:** Applications for AWM Workshop for Women Graduate Students and Postdocs. See the AWM website at <http://www.awm-math.org/>.

**January 31, 2003:** Applications for postdoctoral fellowships for Institut Mittag-Leffler. See <http://www.ml.kva.se/>.

**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](mailto:awm@math.umd.edu).

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

**March 3, 2003:** Applications for EDGE Summer Program. See <http://www.edgeforwomen.org>.

**March 31, 2003:** Nominations for the 2003 Prize for Achievement in Information-Based Complexity. See "Mathematics Opportunities" in this issue.

**April 15, 2003:** Applications for National Research Council Research Associateship Program. See <http://www4.nationalacademies.org/pga/rap.nsf/>, or contact the National Research Council, Associateship Programs (TJ 2114), 2101 Constitution Avenue, NW, Washington, DC 20418; telephone: 202-334-2760; fax: 202-334-2759; email: [rap@nas.edu](mailto:rap@nas.edu).

**April 18, 2003:** Full proposals for NSF IGERT program. See <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](mailto: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](mailto: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](mailto:prof-serv@ams.org).

**June 30, 2003:** Nominations for the Fermat Prize for Mathematics Research. See <http://www.ups-tlse.fr/ACTUALITES/>

[www4.nationalacademies.org/pga/rap.nsf/](http://www4.nationalacademies.org/pga/rap.nsf/), or contact the National Research Council, Associateship Programs (TJ 2114), 2101 Constitution Avenue, NW, Washington, DC 20418; telephone: 202-334-2760; fax: 202-334-2759; email: [rap@nas.edu](mailto:rap@nas.edu).

**August 15, 2003:** Applications for National Research Council Research Associateship Program. See <http://www4.nationalacademies.org/pga/rap.nsf/>, or contact the National Research Council, Associateship Programs (TJ 2114), 2101 Constitution Avenue, NW, Washington, DC 20418; telephone: 202-334-2760; fax: 202-334-2759; email: [rap@nas.edu](mailto:rap@nas.edu).

### National Science Board

The National Science Board is the policymaking body of the National Science Foundation. The names and affiliations of the board members follow.

*Nina V. Fedoroff*  
Willaman Professor of Life Sciences  
Director, Life Sciences Consortium  
Director, Biotechnology Institute  
Pennsylvania State University  
University Park, PA

*Pamela A. Ferguson*  
Professor of Mathematics  
Grinnell College  
Grinnell, IA

*Mary K. Gaillard* (consultant)  
Professor of Physics  
University of California  
Berkeley, CA

*M. R. C. Greenwood* (consultant)  
Chancellor  
University of California  
Santa Cruz, CA

*Stanley V. Jaskolski* (consultant)  
Vice President (Retired)  
Eaton Corporation  
Cleveland, OH

*Anita K. Jones*  
Quarles Professor of Engineering  
and Applied Science  
Department of Computer Science  
University of Virginia  
Charlottesville, VA

*George M. Langford*  
Professor of Biological Sciences  
Dartmouth College  
Hanover, NH

*Jane Lubchenco*  
Wayne and Gladys Valley Professor  
of Marine Biology and Distinguished  
Professor of Zoology  
Oregon State University  
Corvallis, OR

*Joseph A. Miller Jr.*  
Senior Vice President and  
Chief Technology Officer  
Corning, Inc.  
Corning, NY

*Diana S. Natalicio*  
(NSB Vice Chair)  
President  
University of Texas  
El Paso, TX

*Robert C. Richardson*  
Vice Provost for Research  
Professor of Physics  
Cornell University  
Ithaca, NY

*Michael G. Rossmann*  
Hanley Distinguished Professor of  
Biological Sciences  
Purdue University  
West Lafayette, IN

*Maxine Savitz*  
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Honeywell and Technology Partner-  
ships (retired)  
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*Luis Sequeira*  
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Department of Bacteriology and  
Plant Pathology  
University of Wisconsin  
Madison, WI

*Daniel Simberloff*  
Nancy Gore Hunger Professor of  
Environmental Science  
Department of Ecology and  
Evolutionary Biology  
University of Tennessee  
Knoxville, TN

*Bob H. Suzuki* (consultant)  
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California State Polytechnic Univer-  
sity  
Pomona, CA

*Richard Tapia* (consultant)  
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Department of Computational and  
Applied Mathematics  
Rice University  
Houston, TX

*Warren M. Washington*  
Senior Scientist and Section Head  
National Center for Atmospheric  
Research  
Boulder, CO

*John A. White Jr.*  
Chancellor  
University of Arkansas  
Fayetteville, AR

*Mark S. Wrighton*  
Chancellor  
Washington University  
Saint Louis, MO

#### Ex-officio Member

*Rita R. Colwell* (Chairman, Executive  
Committee)  
Director  
National Science Foundation  
Arlington, VA

The contact information for the  
Board is: National Science Board, Na-  
tional Science Foundation, 4201 Wil-  
son Boulevard, Suite 1225, Arlington,  
VA 22230; telephone: 703-292-5111;  
World Wide Web: <http://www.nsf.gov/nsb/>.

#### 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](mailto:notices-booklist@ams.org).*

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

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

*The Annotated Flatland: A Ro-  
mance of Many Dimensions*, Edwin A.  
Abbott; introduction and notes by Ian  
Stewart. Perseus Publishing, Novem-  
ber 2001. ISBN 0-7382-0541-9. (Re-  
viewed November 2002.)

\* *Behind Deep Blue: Building the  
Computer That Defeated the World  
Chess Champion*, by Feng-hsiung Hsu.  
Princeton University Press, November  
2002. ISBN 0-691-09065-3.

*The Bit and the Pendulum: How the  
New Physics of Information Is Revo-  
lutionizing Science*, by Tom Siegfried.  
John Wiley & Sons, February 2000.  
ISBN 0-47132-174-5. (Reviewed Au-  
gust 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 Uni-  
versity 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 Octo-  
ber 2002.)

*Conned Again, Watson! Cautionary  
Tales of Logic, Math, and Probability*,  
by Colin Bruce. Perseus Publishing,  
January 2001. ISBN 0-7382-0345-9.  
(Reviewed November 2002.)

\* *Correspondance Grothendieck-  
Serre*, Pierre Colmez and Jean-Pierre  
Serre, editors. Société Mathématique  
de France, 2001. ISBN 2-85629-104-X.

*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: Untan-  
gling Numbers from the Media, Politi-  
cians, 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. (Reviewed December 2002.)

*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, May 2001. ISBN 0-7382-0442-0. (Reviewed April 2002.)

*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.

*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.

*God in the Equation: How Einstein Became the Prophet of the New Religious Era*, by Corey S. Powell. Free Press, August 2002. ISBN 0-684-86348-0.

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

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

*Hinged Dissections: Swinging and Twisting*, by Greg N. Frederickson. Cam-

bridge University Press, September 2002. ISBN 0-521-81192-9.

*The Honors Class*, by Benjamin Yandell. A K Peters, December 2001. ISBN 1-568-81141-1. (Reviewed September 2002.)

*How the Other Half Thinks: Adventures in Mathematical Reasoning*, by Sherman Stein. McGraw-Hill, July 2001. ISBN 0-071-37339-X. (Reviewed September 2002.)

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

\* *Indra's Pearls: The Vision of Felix Klein*, by David Mumford, Caroline Series, and David J. Wright. Cambridge University Press, January 2002. ISBN 0-521-35253-3. (Reviewed in this issue.)

*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.

*Linked: The New Science of Networks*, by Albert-László Barabási. Perseus Publishing, May 2002. ISBN 0-738-20667-9.

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

\* *Mathematical Reflections*, by Peter Hilton, Derek Holton, and Jean Pedersen. Springer, December 1996. ISBN 0-387-94770-1.

*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 Elsewhere: An Exploration of Ideas Across Cultures*, by Marcia Ascher. Princeton University Press, September 2002. ISBN 0-691-07020-2.

*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). (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 Mathematics of Oz: Mental Gymnastics from Beyond the Edge*, by Clifford Pickover. Cambridge University Press, October 2002. ISBN 0-521-01678-9.

*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.

*Nexus: Small Worlds and the Ground-breaking Science of Networks*, by Mark Buchanan. W. W. Norton & Company, May 2002. ISBN 0-393-04153-0.

*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. (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, 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 0-807-03126-7. (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. (Reviewed December 2002.)

*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 Pervades 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*, C. C. Heyde and E. Seneta, editors. 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.

*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 0-8218-2614-X. (Reviewed March 2002.)

*Turing and the Universal Machine: The Making of the Modern Computer*, by Jon Agar. June 2001, Totem Books. 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 Universe in a Nutshell*, by Stephen Hawking. Bantam Doubleday

Dell, November 2001. ISBN 0-553-80202-X. (Reviewed May 2002.)

\* *Wavelets through a Looking Glass: The World of the Spectrum*, by Ola Bratteli and Palle Jorgensen. Birkhäuser/Springer, 2002. ISBN 0-8176-4280-3.

*What Shape Is a Snowflake?*, by Ian Stewart. W. H. Freeman & Co., November 2001. ISBN 0-716-74794-4. (Reviewed December 2002.)

*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.

REFERENCE & BOOK LIST