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

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.

August 19, 2003: Letters of intent for NSF Focused Research Groups. See http://www.nsf.gov/pubs/2002/nsf02129/nsf02129.htm.

August 25, 2003: Proposals for COBASE Collaborative Grants. See http://www7.nationalacademies.org/dsc/COBASE_Grants_Program.html; telephone: 202-334-2644; fax: 202-334-2614; email: ocee@nas.edu.

September 15, 2003: Full proposals for REU sites. See "Mathematics Opportunities" in this issue.

September 15, 2003: Nominations for Sloan Research Fellowships.

Where to Find It

A brief index to information that appears in this and previous issues.

AMS Bylaws—*November 2001, p. 1205*

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

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

AMS Officers 2002 and 2003 (Council, Executive Committee, Publications Committees, Board of Trustees)—*May 2003, p. 594*

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

Backlog of Mathematics Research Journals—*September 2003, p. 961*

Conference Board of the Mathematical Sciences—*September 2003, p. 945*

Information for *Notices* Authors—*June/July 2003, p. 706*

Mathematics Research Institutes Contact Information—*August 2003, p. 821*

National Science Board—*January 2003, p. 64*

New Journals for 2002—*June/July 2003, p. 708*

NRC Board on Mathematical Sciences and Their Applications—*March 2003, p. 383*

NRC Mathematical Sciences Education Board—*April 2003, p. 489*

NSF Mathematical and Physical Sciences Advisory Committee—*February 2003, p. 261*

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)*

Contact the Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, NY 10111; or see http://www.sloan.org.

September 16, 2003: Proposals for Enhancing the Mathematical Sciences Workforce in the 21st Century (EMSW21). See "Mathematics Opportunities" in this issue.

September 19, 2003: Full proposals for NSF Focused Research Groups. See http://www.nsf.gov/pubs/2002/nsf02129/nsf02129.htm.

September 30, 2003: Nominations for Information-Based Complexity Young Researcher Award. See "Mathematics Opportunities" in this issue.

October 1, 2003: Applications for AWM Travel Grants. See "Mathematics Opportunities" in this issue.

October 1, 2003: Nominations for AWM Hay Award and Schafer Prize. Contact The Hay Award Selection Committee or The Alice T. Schafer Award Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461; telephone 301-405-7892; email: awm@math.umd.edu; website: http://www.awm-math.org.

October 8, 2003: Full proposals for NSF Distinguished International Postdoctoral Research Fellowships. See "Mathematics Opportunities" in this issue.

October 15, 2003: Applications for spring 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, Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904; email: prof-serv@ams.org.

October 15, 2003: Proposals for NSA Grant and Sabbatical Programs. See "Mathematics Opportunities" in this issue.

October 17, 2003: Applications for NSF Mathematical Sciences Postdoctoral Research Fellowships. See http://www.fastlane.nsf.gov/jsp/homepage/postdoc_fel.jsp; telephone: 703-306-1870; email: msprf@nsf.gov.

November 1, 2003: Applications for 2004–2005 Fulbright spring/summer seminars in Germany, Korea, and Japan and for summer German Studies Seminar. Contact the Council for International Exchange of Scholars (CIES), 3007 Tilden Street, NW, Suite 5L, Washington, DC 20008-3009; telephone: 202-686-7877; email: apprequest@cies.iie.org; or see http://www.cies.org.

November 1, 2003: Applications for NSF International Research Fellow Awards. See "Mathematics Opportunities" in this issue.

November 1, 2003: Proposals for workshops at the AIM Research Conference Center. See "Mathematics Opportunities" in this issue.

December 1, 2003: Applications for AMS Centennial Fellowships. See "Mathematics Opportunities" in this issue.

December 1, 2003: Submissions for Sunyer i Balaguer Prize. See "Mathematics Opportunities" in this issue.

December 31, 2003: Entries for *Cryptologia* paper competitions. See http://www.dean.usma.edu/math/pubs/cryptologia/ or contact *Cryptologia,* Department of Mathematical Sciences, United States Military Academy, West Point, NY 10996; email: Cryptologia@usma.edu.

January 2, 2004: Applications for Fields Institute postdoctoral fellowships. See http://www.fields.utoronto.ca/proposals/postdoc.html.

February 1, 2004: Applications for AWM Travel Grants and AWM Mentoring Travel Grants. See "Mathematics Opportunities" in this issue.

May 1, 2004: Applications for AWM Travel Grants. See "Mathematics Opportunities" in this issue.

June 30, 2004: Proposals for DMS/NIGMS Program in Mathematical Biology. See http://www.nsf.gov/pubs/2002/nsf02125/nsf02125.htm.

Conference Board on the Mathematical Sciences

1529 Eighteenth Street, NW
Washington, DC 20036
202-293-1170
http://www.cbmsweb.org/

Ronald C. Rosier
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202-293-1170
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Member Societies:
American Mathematical Association of Two-Year Colleges (AMATYC)
American Mathematical Society (AMS)
American Statistical Association (ASA)
Association for Symbolic Logic (ASL)
Association for Women in Mathematics (AWM)
Association of Mathematics Teacher Educators (AMTE)
Association of State Supervisors of Mathematics (ASSM)
Benjamin Banneker Association (BBA)
Institute for Operations Research and the Management Sciences (INFORMS)
Institute of Mathematical Statistics (IMS)
Mathematical Association of America (MAA)
National Association of Mathematicians (NAM)
National Council of Supervisors of Mathematics (NCSM)
National Council of Teachers of Mathematics (NCTM)
Society for Industrial and Applied Mathematics (SIAM)
Society of Actuaries (SOA)

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.

1089 and All That: A Journey into Mathematics, by David Acheson. Oxford University Press, July 2002. ISBN 0-19-851623-1.

Abel's Proof: An Essay on the Sources and Meaning of Mathematical Unsolvability, by Peter Pesic. MIT Press, May 2003. ISBN 0-262-16216-4.

All the Mathematics You Missed (But Need to Know for Graduate School), by Thomas A. Garrity. Cambridge University Press, December 2001. ISBN 0-521-79707-1.

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 November 2002.)

The Art of the Infinite: The Pleasures of Mathematics, by Robert Kaplan and Ellen Kaplan. Oxford University Press, March 2003. ISBN 0-195-14743-X.

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.

Beyond the Limit: The Dream of Sofya Kovalevskaya, by Joan Spicci. Forge, August 2002. ISBN 0-765-30233-0.

Codebreakers: Arne Beurling and the Swedish Crypto Program During World War II, by Bengt Beckman. Translated by Kjell-Ove Widman. AMS, February 2003. ISBN 0-8218-2889-4. (Reviewed in this issue.)

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 November 2002.)

The Constants of Nature: From Alpha to Omega—The Numbers That Encode the Deepest Secrets of the Universe, by John D. Barrow. Jonathan Cape, September 2002; Pantheon Books, January 2003. ISBN 0-375-42221-8.

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

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. (Reviewed February 2003.)

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.)

Doing Mathematics: Convention, Subject, Calculation, Analogy, by Martin H. Krieger. World Scientific, April 2003. ISBN 9-812-38200-3.

Emergence of the Theory of Lie Groups. An Essay in the History of Mathematics, 1869–1926, by Thomas Hawkins. Springer-Verlag, 2000. ISBN 0-387-98963-3. (Reviewed June/July 2003.)

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

Four Colors Suffice: How the Map Problem Was Solved, by Robin Wilson. Princeton University Press, March 2003. ISBN 0-691-11533-8.

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.)

Gamma: Exploring Euler's Constant, by Julian Havil. Princeton University Press, May 2003. ISBN 0-691-09983-9.

Geometrical Landscapes: The Voyages of Discovery and the Transformation of Mathematical Practice, by Amir R. Alexander. Stanford University Press, September 2002. ISBN 0-804-73260-4.

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

The Glass Wall: Why Mathematics Can Seem Difficult, by Frank Smith. Teachers College Press, July 2002. ISBN 0-807-74241-4 (paperback), 0-807-74242-2 (cloth).

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 Golden Ratio: The Story of Phi, the World's Most Astonishing Number, by Mario Livio. Broadway Books, October 2002. ISBN 0-767-90815-5.

Hinged Dissections: Swinging and Twisting, by Greg N. Frederickson. Cambridge University Press, September 2002. ISBN 0-521-81192-9.

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

Imagining Numbers (particularly the square root of minus fifteen), by Barry Mazur. Farrar, Straus and Giroux, February 2003. ISBN 0-374-17469-5.

In Code: A Mathematical Journey, by Sarah Flannery and David Flannery. Workman Publishing, May 2001. ISBN 0-761-12384-9. (Reviewed April 2003.)

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 January 2003.)

It Must Be Beautiful: Great Equations of Modern Science, Graham Farmelo, editor. Granta Books, February 2002. ISBN 1-862-07479-8. (Reviewed March 2003.)

Janos Bolyai, Euclid, and the Nature of Space, by Jeremy J. Gray. MIT Press, May 2003. ISBN 0-262-57174-9.

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

Mathematical Apocrypha: Stories and Anecdotes of Mathematicians and the Mathematical, by Steven G. Krantz. Mathematical Association of America, July 2002. ISBN 0-883-85539-9.

Mathematical Reflections, by Peter Hilton, Derek Holton, and Jean Pedersen. Springer, December 1996. ISBN 0-387-94770-1. (Reviewed February 2003.)

Mathematical Vistas, by Peter Hilton, Derek Holton, and Jean Pedersen. Springer-Verlag, January 2002. ISBN 0-387-95064-8. (Reviewed February 2003.)

Mathematics and the Roots of Postmodern Thought, by Vladimir Tasić. Oxford University Press, 2001. ISBN 0-195-13967-4. (Reviewed August 2003.)

Mathematics: A Very Short Introduction, by Timothy Gowers. Oxford University Press, October 2002. ISBN 0-192-85361-9.

Mathematics Elsewhere: An Exploration of Ideas across Cultures, by Marcia Ascher. Princeton University Press, September 2002. ISBN 0-691-07020-2. (Reviewed May 2003.)

The Mathematics of Juggling, by Burkard Polster. Springer, November 2002. ISBN 0-387-95513-5.

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

M. C. Escher's Legacy: A Centennial Celebration, edited by Doris Schattschneider and Michele Emmer. Springer, January 2003. ISBN 3-540-42458-X. (Reviewed April 2003.)

The Millennium Problems: The Seven Greatest Unsolved Mathematical Puzzles of Our Time, by Keith J. Devlin. Basic Books, October 2002. ISBN 0-465-01729-0. (Reviewed in this issue.)

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

The Music of the Primes: Searching to Solve the Greatest Mystery in Mathematics, by Marcus Du Sautoy. HarperCollins, April 2003. ISBN 0-066-21070-4.

A New Kind of Science, by Stephen Wolfram. Wolfram Media, Inc., May 2002. ISBN 1-579-55008-8. (Reviewed February 2003.)

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

The One True Platonic Heaven: A Scientific Fiction of the Limits of Knowledge, by John L. Casti. Joseph Henry Press, May 2003. ISBN 0-309-08547-0.

Origami^3, edited by Thomas Hull. A K Peters, July 2002. ISBN 1-568-81181-0.

Prime Obsession: Bernhard Riemann and the Greatest Unsolved Problem, by John Derbyshire. Joseph Henry Press, March 2003. ISBN 0-309-08549-7.

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.)

Remarkable Mathematicians, by Ioan James. Cambridge University Press, February 2003. ISBN 0-521-52094-0.

The Riemann Hypothesis: The Greatest Unsolved Problem in Mathematics, by Karl Sabbagh. Farrar Straus & Giroux, April 2003. ISBN 0-374-25007-3.

The Search for Certainty: A Philosophical Account of Foundations of Mathematics, by Marcus Giaquinto. Oxford University Press, October 2002. ISBN 0-198-75244-X.

Six Degrees: The Science of a Connected Age, by Duncan J. Watts. W. W. Norton & Company, February 2003. ISBN 0-393-04142-5.

Sync: The Emerging Science of Spontaneous Order, by Steven Strogatz. Hyperion, February 2003. ISBN 0-786-86844-9.

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 Are the Odds? The Chances of Extraordinary Events in Everyday Life, by Jefferson Hane Weaver. Prometheus Books, February 2002. ISBN 1-573-92933-6.

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. (Reviewed March 2003.)

REFERENCE & BOOK LIST