

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.

Upcoming Deadlines

July 19, 1999: Deadline for proposals for the second VIGRE Grant competition. For more information, consult the NSF Web site at <http://www.nsf.gov/cgi-bin/getpub?nsf9916/>.

July 22, 1999: Deadline for proposals for the NSF CAREER/PECASE awards. For more information, see the CAREER/PECASE Web site at <http://www.nsf.gov/home/crssprgm/career/guide.htm> or contact the National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230, telephone 703-306-1870 (Division of Mathematical Sciences, NSF).

July 30, 1999: Deadline for submission of proposals for Long-Term Project Development grants from the Office of International Affairs of the National Research Council. For more information, contact the Office of International Affairs, National Research Council, 2101 Constitution Avenue, NW (FO 2060), Washington, DC 20418;

telephone 202-334-3680; fax 202-334-2614; e-mail: ocее@nas.edu; World Wide Web <http://www2.nas.edu/oia/22da.html>.

August 1, 1999: Deadline for applications for the Fulbright Scholar Program lecturing and research grants for the academic year 2000–2001. For more information, contact the USIA Fulbright Scholar Program, Council for International Exchange of Scholars,

3007 Tilden Street, NW, Suite 5L, Box GNEWS, Washington, DC 20008-3009; telephone 202-686-7877; World Wide Web <http://www.cies.org/>.

September 1, 1999: Deadline for nominations for National Academy of Sciences Mathematics Award. For more information, see “Mathematics Opportunities” in this issue.

September 1, 1999: Deadline for receipt of applications for the AWM

Where to Find It

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

AMS e-mail addresses

November 1998, p. 1369

AMS Ethical Guidelines

June 1995, p. 694

AMS officers and committee members

October 1998, p. 1209

Board on Mathematical Sciences and Staff

April 1999, p. 479; June/July 1999, p. 696

Bylaws of the American Mathematical Society

November 1997, p. 1339

Classification of degree-granting departments of mathematics

January 1997, p. 48

Mathematical Sciences Education Board and Staff

May 1998, p. 632; February 1999, p. 244

Mathematics Research Institutes contact information

May 1999, p. 580; August 1999, p. 804

National Science Board

March 1999, p. 361

NSF Mathematical and Physical Sciences Advisory Committee

March 1999, p. 362

Officers of the Society 1998 and 1999 (Council, Executive Committee, Publications Committees, Board of Trustees)

May 1999, p. 583

Program officers for federal funding agencies (DoD, DoE, NSF)

October 1998, pp. 1182–1184; February 1999, p. 244

workshop for women graduate students and postdocs. For more information, contact the 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.

October 1, 1999: Deadline for receipt of proposals for the Office of Naval Research Young Investigator Program. For more information, see "Mathematics Opportunities" in this issue.

October 1, 1999: Deadline for receipt of nominations for the AWM Louise Hay Award. For more information, call the AWM at 301-405-7892 or send e-mail to awm@math.umd.edu.

October 1, 1999: Deadline for receipt of nominations for the AWM Alice T. Schafer Mathematics Prize. For more information, contact 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; e-mail: awm@math.umd.edu.

October 1, 1999: Deadline for applications for NSF/AWM Travel Grants for Women. For more information, see the AWM Web site, <http://www.awm-math.org/travelgrants.html>; or telephone 301-405-7892 or send e-mail to awm@math.umd.edu.

November 1, 1999: Deadline for applications for the Fulbright Scholar Program international education and academic administrator seminars. For more information, contact the USIA Fulbright Scholar Program, Council for International Exchange of Scholars, 3007 Tilden Street, NW, Suite 5L, Box GNEWS, Washington, DC 20008-3009; telephone 202-686-7877; World Wide Web <http://www.cies.org/>.

January 1, 2000: Deadline for applications for the Fulbright Scholar Program, NATO advanced research fellowships and institutional grants. For more information, contact the USIA Fulbright Scholar Program, Council for International Exchange of Scholars, 3007 Tilden Street, NW, Suite 5L, Box GNEWS, Washington, DC 20008-3009; telephone 202-686-7877; World Wide Web <http://www.cies.org/>.

January 15, 2000: Deadline for applications for NIST/NRC Postdoctoral Research Associateships Program. Further information may be obtained from the NIST Web site, <http://www.nist.gov/oiaa/postdoc.htm>, or by contacting Joy Brooks, Information Specialist, NIST, telephone 301-975-3071 or Jack J. Hsia, Chief of Academic Affairs, NIST, telephone 301-975-3067; or write to the National Research Council, Associateship Programs-TJ2114, 2101 Constitution Avenue, NW, Washington, DC 20418, telephone 202-334-2760.

Contact Information for Mathematics Institutes

This list supplements the list of institute contact information that appeared in the May 1999 issue of the *Notices*, pp. 580-581.

Stefan Banach International Mathematical Center

00-950 Warszawa ul Mokotowska 25, Poland
Telephone: +48-22-628-01-92
Fax: +48-22-622-57-50
e-mail: banach@impan.gov.pl
World Wide Web: <http://www.impan.gov.pl/BC/>

Centre for Mathematical Physics and Stochastics (MaPhySto)

Department of Mathematical Sciences
University of Aarhus
Ny Munkegade, DK-8000 Aarhus C, Denmark
Telephone: +45-8942-3532
Fax: +45-8613-1769
e-mail: maphysto@maphysto.dk
World Wide Web: <http://www.maphysto.dk/>

Centre de Recerca Matemàtica (CRM)

Institut d'Estudis Catalans
Apartat 50
E-08193 Bellaterra, Spain
Telephone: +34-93-581-1081
Fax: +34-93-581-2202
e-mail: crm@crm.es
World Wide Web: <http://crm.es/>

Centro de Investigacion en Matemáticas (CIMAT)

A. P. 402, Guanajuato, Gto.
C.P. 36000, Mexico

Telephone: +52-473-271-55
Fax: +52-473-257-49
e-mail: cimat@cimat.mx
World Wide Web: <http://www.cimat.mx/>

Chennai Mathematical Institute

92 G. N. Chetty Road
Chennai 600 017, India
Telephone: +91-044-8284232
Fax: +91-044-8256842
e-mail: office@smi.ernet.in
World Wide Web: <http://www.smi.ernet.in/>

Forschungsinstitut für Mathematik (FIM)

Eidgenössische Technische Hochschule Zürich
8092 Zürich, Switzerland
Telephone: +41-1-632-3475
Fax: +41-1-632-1085
e-mail: scherbel@math.ethz.ch
World Wide Web: <http://www.fim.math.ethz.ch/>

Institute for Pure and Applied Mathematics (IPAM)

Mathematics Department
University of California, Los Angeles
6363 Math Sciences
405 Hilgard Avenue
Box 951555
Los Angeles, California 90095-1555
Telephone: 310-825-4701
Fax: 310-206-6673
e-mail: ipam@math.ucla.edu
World Wide Web: <http://www.ipam.org/>

Istituto Nazionale di Alta Matematica "F. Severi"

Citta Universitaria
P.le Aldo Moro 5
00185 Rome, Italy
Telephone: +39-06490320
Fax: +39-064462293
e-mail: indam@mat.uniroma1.it
World Wide Web: <http://indam.mat.uniroma1.it/>

Korea Institute for Advanced Study (KIAS)

207-43 Cheongryangri-dong
Dongdaemun-gu
Seoul 130-012, Korea
Telephone: +82-2-958-3701
Fax: +82-2-958-3770

e-mail: webmaster@admin.kias.
re.kr
World Wide Web:
<http://www.kias.re.kr/>

Mathematical Research Centre (MCAA)

The University of Aarhus
Department of Mathematical
Sciences
Ny Munkegade
8000 Aarhus C, Denmark
Telephone: +45-8942-3532
Fax: +45-8613-1769
e-mail: mcaa@imf.au.dk
World Wide Web:
[http://www.imf.au.dk/
ResearchC/MCAA/index.html](http://www.imf.au.dk/ResearchC/MCAA/index.html)

Pacific Institute for the Mathematical Sciences

1924 West Mall
210-218, Auditorium Annex
University of British Columbia
Vancouver, BC, V6T 1Z2, Canada
Telephone: 604-822-3922
Fax: 604-822-0883
e-mail: pims@pims.math.ca
World Wide Web:
<http://www.pims.math.ca/>

Steklov Institute of Mathematics

Russian Academy of Sciences
Leninsky, 32a
Moscow, Russia
Telephone: +7-095-938-1902
Fax: +7-095-938-1466
World Wide Web:
[http://www.ras.ru/local.docs/
mian/mian.html](http://www.ras.ru/local.docs/mian/mian.html)

Steklov Institute of Mathematics

27, Fontanka
St. Petersburg 191011, Russia
Telephone: 7-812-312-40-58
Fax: 7-812-310-53-77
e-mail: admin@pdmi.ras.ru
World Wide Web:
<http://www.pdmi.ras.ru/>

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.

Abraham Robinson: The Creation of Nonstandard Analysis, a Personal and Mathematical Odyssey, by Joseph Warren Dauben. Princeton University Press, 1998. ISBN 0-691-05911-X.

Against the Gods: The Remarkable Story of Risk, by Peter L. Bernstein. John Wiley & Sons, 1996. ISBN 0-471-12104-5. (Reviewed January 1999.)

The Algorithmic Beauty of Sea Shells (Virtual Laboratory), by Hans Meinhardt, Przemyslaw Prusinkiewicz, and Deborah R. Fowler. Springer-Verlag, 1998. ISBN 3-540-63919-5.

The Applicability of Mathematics as a Philosophical Problem, by Mark Steiner. Harvard University Press, 1998. ISBN 0-674-04097-X.

The Apprenticeship of a Mathematician, by André Weil, translation by Jennifer Gage, Birkhäuser Boston, 1992. ISBN 0-817-62650-6. (Reviewed April 1999.)

A Beautiful Mind: A Biography of John Forbes Nash, Jr., by Sylvia Nasar. Simon & Schuster, 1998. ISBN 0-684-81906-6. (Reviewed November 1998.)

Challenges, by Serge Lang. Springer-Verlag, 1998. ISBN 0-387-94861-9.

Drawbridge Up: Mathematics—A Cultural Anathema (Zugbrücke ausser Betrieb: Die Mathematik im Jenseits der Kultur), by Hans Magnus Enzensberger. A. K. Peters, 1999. ISBN 1-568-81099-7.

e: The Story of a Number, by Eli Maor. Paperback edition, Princeton University Press, 1998. ISBN 0-691-05854-7.

Emergence: From Chaos to Order, by John Holland. Perseus Press, 1998. ISBN 0-201-14943-5.

Fashionable Nonsense: Postmodern Intellectuals' Abuse of Science, by Alan Sokal and Jean Bricmont. English version of *Impostures Intellectuelles* (reviewed August 1998). St. Martin's Press, 1998. ISBN 0-312-19545-1.

The Feynman Processor, by Gerard J. Milburn and Paul Davies. Helix Books, Perseus, 1998. ISBN 0-738-20016-6.

The French Mathematician, by Tom Petsinis. Walker and Company, 1998. ISBN 0-802-71345-9.

Geometry Civilized: History, Culture, and Technique, by J. L. Heilbron, Oxford University Press, 1998. ISBN 0-198-50078-5.

Goodbye, Descartes: The End of Logic and the Search for a New Cosmology of the Mind, by Keith Devlin. John Wiley & Sons, 1998. ISBN 0-471-14216-6.

The Number Sense: How the Mind Creates Mathematics, by Stanislas Dehaene. Oxford University Press, 1997. ISBN 0-195-11004-8.

An Imaginary Tale: The Story of $\sqrt{-1}$, by Paul J. Nahin. Princeton University Press, 1998. ISBN 0-691-02795-1.

In the Light of Logic, by Solomon Feferman. Oxford University Press, 1998. ISBN 0-195-08030-0.

The Invention of Infinity: Mathematics and Art in the Renaissance, by J. V. Field. Oxford University Press, 1997. ISBN 0-198-52394-7.

Jacques Hadamard, A Universal Mathematician, by Vladimir Maz'ya and Tatyana Shaposhnikova. AMS/London Mathematical Society, 1998. ISBN 0-821-80841-9.

James Joseph Sylvester: Life and Work in Letters, by Karen Hunger Parshall. Oxford University Press, 1998. ISBN 0-198-50391-1.

The Jungles of Randomness: A Mathematical Safari, by Ivars Peterson. Paperback edition, John Wiley & Sons, 1998. ISBN 0-471-29587-6. (Reviewed June/July 1999.)

Knowing And Teaching Elementary Mathematics: Teachers' Understanding of Fundamental Mathematics in China and the United States, by Liping Ma. Lawrence Erlbaum Publishers, to appear May 1999. ISBN 0-805-82908-3 (cloth), 0-805-82909-1 (paper).

The Language of Mathematics: Making the Invisible Visible, by Keith Devlin. W. H. Freeman and Company, 1998. ISBN 0-716-73379-X.

Life by the Numbers, by Keith Devlin. John Wiley & Sons, 1998. ISBN 0-471-24044-3.

The Magical Maze: Seeing the World through Mathematical Eyes, by Ian Stewart. John Wiley & Sons, 1998. ISBN 0-471-19297-X.

The Man Who Loved Only Numbers: The Story of Paul Erdős and the Search for Mathematical Truth, by Paul Hoffman. Hyperion, 1998. ISBN 0-786-86362-5. (Reviewed October 1998.)

The Mathemagician and the Pied Puzzler: A Collection in Tribute to Martin Gardner, edited by Elwyn Berlekamp and Tom Rodgers. AK Peters, 1999. ISBN 1-568-81075-X.

A Mathematical Mystery Tour: Discovering the Truth and Beauty of the Cosmos, by A. K. Dewdney. John Wiley & Sons, 1999. ISBN 0-471-23847-3.

Mathematical Reasoning: Analogies, Metaphors, and Images, edited by Lyn English. Lawrence Erlbaum Associates, 1997. ISBN 0-805-81979-7. (Reviewed May 1999.)

Mathematics for the Curious, by Peter M. Higgins. Oxford University Press, 1998. ISBN 0-192-88072-1.

Mathematics: From the Birth of Numbers, by Jan Gullberg and Peter Hilton. W. W. Norton and Company, 1997. ISBN 0-393-04002-X.

The Mathematics of Ciphers; Number Theory and RSA Cryptography, by S. C. Coutinho. AK Peters, 1998. ISBN 1-568-81082-2.

Modern Mathematics in the Light of the Fields Medals, by Michael Monastyrsky. AK Peters, 1997. ISBN 1-568-81065-2.

The Moment of Proof: Mathematical Epiphanies, by Donald C. Benson. Oxford University Press, March 1999. ISBN 0-195-11721-2.

Moral Calculations: Game Theory, Logic, and Human Frailty, by László Mészáros. Copernicus-Springer Verlag, 1998. ISBN 0-387-98419-4.

My Brain is Open: The Mathematical Journeys of Paul Erdős, by Bruce Schecter. Simon & Schuster, 1998. ISBN 0-684-84635-7.

Mystic, Geometer, and Intuitionist: The Life of L. E. J. Brouwer, by Dirk Van Dalen. Oxford University Press, 1999. ISBN 0-198-50297-4.

New Directions in the Philosophy of Mathematics: An Anthology, Thomas Tymoczko, Editor. Princeton University Press, revised edition, 1998. ISBN 0-691-03498-2.

The Number Devil, by Hans Magnus Enzensberger. Metropolitan Books, 1998. ISBN 0-805-05770-6.

Once Upon a Number: The Hidden Mathematical Logic of Stories, by John Allen Paulos. Basic Books, 1998. ISBN 0-465-05158-8.

Paul Dirac: The Man and His Work, by Abraham Pais, Maurice Jacob, David Olive, and Michael Atiyah. Cambridge University Press, 1998. ISBN 0-521-58382-9. (Reviewed October 1998.)

Philosophy of Mathematics: An Introduction to a World of Proofs and Pictures, by James Robert Brown. Routledge, 1998. ISBN 0-415-12274-0.

The Pleasures of Counting, by T. W. Körner. Cambridge University Press, 1997. ISBN 0-521-56087-X; 0-521-56823-4. (Reviewed March 1998.)

Polyhedra, by Peter Cromwell. Cambridge University Press, 1997. ISBN 0-521-55432-2. (Reviewed September 1998.)

Privacy on the Line: The Politics of Wiretapping and Encryption, by Whitfield Diffie and Susan Landau. MIT Press, 1998. ISBN 0-262-04167-7. (Reviewed June/July 1998.)

Proofs from THE BOOK, by Martin Aigner and Günter Ziegler. Springer-Verlag, 1998. ISBN 3-540-63698-6. (Reviewed in this issue.)

The Queen of Mathematics: A Historically Motivated Guide to Number Theory, by Jay R. Goldman. AK Peters, 1998. ISBN 1-568-81006-7.

Randomness, Deborah Bennett. Harvard University Press, 1998. ISBN 0-674-10745-4.

Reasoning with the Infinite: From the Closed World to the Mathematical Universe, by Michel Blay (translated by M. B. DeBevoise). University of Chicago Press, 1998. ISBN 0-226-05834-4.

Strength in Numbers, by Sherman Stein. John Wiley & Sons, 1996. ISBN 0-471-152528-8. (Reviewed May 1999.)

Tracking the Automatic Ant, and Other Mathematical Explorations, by David Gale. Springer-Verlag, 1998. ISBN 0-387-98272-8.

The Universe and the Teacup: The Mathematics of Truth and Beauty, by K. C. Cole. Harcourt Brace, 1998. ISBN 0-151-00323-8. (Reviewed March 1999.)

Visual Explanations—Images and Quantities, Evidence and Narrative,

by Edward R. Tufte. Graphics Press, 1997. ISBN 0-961-39212-6. (Reviewed January 1999.)

What's Happening in the Mathematical Sciences, 1998–1999, by Barry Cipra. AMS, 1999. ISBN 0-821-80766-8.

Why Do Buses Come In Threes?, by Rob Eastaway and Jeremy Wyndham. John Wiley & Sons, 1999. ISBN 0-471-34756-6.

Women in Mathematics: The Addition of Difference, by Claudia Henrion. Indiana University Press, 1997. ISBN 0-253-33279-6. (Reviewed May 1998.)

The World According to Wavelets, by Barbara Burke Hubbard. AK Peters, second edition, 1999. ISBN 1-568-81072-5.