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.ou.edu` in the case of the editor and `notices@ams.org` in the case of the managing editor. The fax numbers are 405-325-7484 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

November 16, 2006: Applications for NRC-Ford Foundation Diversity Predoctoral Fellowships. See `http://www.nationalacademies.org/grantprograms.html`.

November 30, 2006: Applications for NRC-Ford Foundation Diversity Dissertation and Postdoctoral Fellowships. See `http://www.nationalacademies.org/grantprograms.html`.

December 1, 2006: Applications for AMS Centennial Research Fellowship Program. See `http://www.ams.org/employment/centflyer.html` or contact Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294; telephone 401-455-4107; email: `prof-serv@ams.org`.

December 2, 2006: Submissions for 2007 Sunyer i Balaguer Prize. See `http://www.crm.es/FerranSunyerBalaguer/ffsb.htm`.

December 12, 2006: Applications for NSF East Asia and Pacific Summer Institutes (EAPSI) program. See `http://www.nsf.gov/funding/`

Where to Find It

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

AMS Bylaws—*November 2005, p. 1239*

AMS Email Addresses—*February 2006, p. 251*

AMS Ethical Guidelines—*June/July 2006, p. 701*

AMS Officers 2005 and 2006 (Council, Executive Committee, Publications Committees, Board of Trustees)—*May 2006, p. 604*

AMS Officers and Committee Members—*October 2006, p. 1076*

Conference Board of the Mathematical Sciences—*September 2006, p. 911*

Information for *Notices* Authors—*June/July 2006, p. 696*

Mathematics Research Institutes Contact Information—*August 2006, p. 798*

National Science Board—*January 2006, p. 62*

New Journals for 2004—*June/July 2006, p. 697*

NRC Board on Mathematical Sciences and Their Applications—*March 2006, p. 369*

NRC Mathematical Sciences Education Board—*April 2006, p. 488*

NSF Mathematical and Physical Sciences Advisory Committee—*February 2006, p. 255*

Program Officers for Federal Funding Agencies—*October 2006, p. 1072 (DoD, DoE); December 2006 p. 1369 (NSF)*

Stipends for Study and Travel—*September 2006, p. 913*

pgm_summ.jsp?pims_id=5284&org=NSF.

December 15, 2006: Proposals for DMS/NIGMS Initiative to Support Research in the Area of Mathematical Biology. See "Mathematics Opportunities" in this issue.

December 15, 2006: Applications for AMS Epsilon Fund. See the website http://www.ams.org/outreach/epsilon.html; or contact Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294; telephone 800-321-4267, ext. 4170; email: prof-serv@ams.org.

December 1, 2006: Applications for Jefferson Science Fellowships. Contact jsf@nas.edu, telephone 202-334-2643, or see http://www7.nationalacademies.org/jefferson/.

December 31, 2006: Nominations and supporting materials for NSF Alan T. Waterman Award. See "Mathematics Opportunities" in this issue.

December 31, 2006: Entries for Pirelli INTERNETional Award competition. See http://www.pirelliaward.com.

January 5, 2007: Applications for IMA postdoctoral and New Directions programs. See http://www.ima.umn.edu.

January 10, 2007: Applications for AAUW Selected Professions Fellowships. See http://www.aauw.org/fga/fellowships_grants/selected.cfm or contact the AAUW Educational Foundation, Selected Professions Fellowships, P.O. Box 4030, Iowa City, IA 52243-4030.

January 15, 2007: Applications for AMS-AAAS Mass Media Summer Fellowships. See http://www.aaas.org/programs/education/MassMedia/ or contact Stacey Pasco, Manager, Mass Media Program, AAAS Mass Media Science and Engineering Fellows Program, 1200 New York Avenue, NW, Washington, DC 20005; telephone 202-326-6441; fax 202-371-9849; email: spasco@aaas.org. Further information is also available at http://www.ams.org/government/massmediaann.html and through the AMS Washington Office, 1527 Eighteenth Street, NW, Washington, DC 20036; telephone

202-588-1100; fax 202-588-1853; email: amsdc@ams.org.

January 25, 2007: Proposals for NSF Scientific Computing Research Environments for the Mathematical Sciences (SCREMS). See "Mathematics Opportunities" in this issue.

January 31, 2007: Applications for AMS Congressional Fellowship. See http://www.ams.org/government/congressfellowann.html or contact the AMS Washington Office at 202-588-1100, email: amsdc@ams.org.

February 1, 2007: Applications for AWM Travel Grants and Mentoring Travel Grants. See http://www.awm-math.org/travelgrants.html; telephone 703-934-0163; email: awm@math.umd.edu; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

February 9, 2007: Applications for Newton Fellowships of the Math for America Foundation (MfA). See "Mathematics Opportunities" in this issue.

February 16, 2007: Nominations for CMI Liftoff fellowships. See "Mathematics Opportunities" in this issue.

March 1, 2007: Applications for National Academies Christine Mirzayan Graduate Fellowships for the summer program. See "Mathematics Opportunities" in this issue.

April 15, 2007: Applications for AMS "Math in Moscow" Scholarships for fall 2007. 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 and application forms for the AMS scholarships see http://www.ams.org/outreach/mimoscow.html or contact Math in Moscow Program, Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904-2294; email: student-serv@ams.org.

May 1, 2007: Applications for AWM Travel Grants. See http://www.awm-math.org/travelgrants.html; telephone 703-934-0163; email: awm@math.umd.edu; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

June 1, 2007: Applications for National Academies Christine Mirzayan Graduate Fellowships for the fall program. See "Mathematics Opportunities" in this issue.

June 5, 2007: Proposals for Enhancing the Mathematical Sciences Workforce in the Twenty-First Century. See http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05595.

June 30, 2007: Nominations for 2007 Fermat Prize. See http://www.math.ups-tlse.fr/Fermat/.

October 1, 2007: Applications for AWM Travel Grants. See http://www.awm-math.org/travelgrants.html; telephone 703-934-0163; email: awm@math.umd.edu; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

NSF Division of Mathematical Sciences

Listed below are names, email addresses, and telephone numbers for the program directors for the present academic year in the Division of Mathematical Sciences (DMS) of the National Science Foundation. The postal address is: Division of Mathematical Sciences, National Science Foundation, Room 1025, 4201 Wilson Boulevard, Arlington, VA 22230. The DMS Web page is http://www.nsf.gov/div/index.jsp?div=DMS.

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Administrative Officer
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Division Secretary
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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 is contact information for those EHR program officers whose fields are 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 postal address is: Directorate for Education and Human Resources, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. The EHR web page is http://www.nsf.gov/ehr.

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Office of the Director/Office of Integrative Activities
James Lightbourne
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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.

Alan Turing's Automatic Computing Engine: The Master Codebreaker's Struggle to Build the Modern Computer, edited by B. Jack Copeland. Oxford University Press, June 2005. ISBN 0-198-56593-3.

Arthur Cayley: Mathematician Laureate of the Victorian Age, by Tony Crilly. Johns Hopkins University Press, December 2005. ISBN 0-801-88011-4.

A Beautiful Math: John Nash, Game Theory, And the Modern Quest for a Code of Nature, by Tom Siegfried. Joseph Henry Press, October 2006. ISBN 0-309-10192-1.

Beyond Coincidence: Amazing Stories of Coincidence and the Mystery and Mathematics Behind Them, by Martin Plimmer and Brian King.

Thomas Dunne Books, December 2005. ISBN 0-312-34036-2.

The Book of Presidents, by Susan Oakes, Alan Pears, and Adrian Rice. London Mathematical Society, 2005. ISBN 0-950-27341-4.

Change Is Possible: Stories of Women and Minorities in Mathematics, by Patricia Clark Kenschaft. AMS, September 2005. ISBN 0-8218-3748-6.

The Coxeter Legacy: Reflections and Projections, edited by Chandler Davis and Erich W. Ellers. AMS, March 2006. ISBN 0-8218-3722-2.

The Curious Incident of the Dog in the Night-time, by Mark Haddon. Vintage, May 2004. ISBN 1-400-03271-7. (Reviewed March 2006.)

Dark Hero of the Information Age: In Search of Norbert Wiener, by Flo Conway and Jim Siegelman. Basic Books, December 2004. ISBN 0-738-20368-8. (Reviewed May 2006.)

Decoding the Universe: How the New Science of Information Is Explaining Everything in the Cosmos, from Our Brains to Black Holes, by Charles Seife. Viking Adult, February 2006. ISBN 0-670-03441-X.

Descartes: A Biography, by Desmond Clarke. Cambridge University Press, March 2006. ISBN 0-521-82301-3.

Divine Proportions: Rational Trigonometry to Universal Geometry, by N. J. Wildberger. Wild Egg Books, September 2005. ISBN 0-9757492-0-X.

The Equations: Icons of Knowledge, by Sander Bais. Harvard University Press, November 2005. ISBN 0-674-01967-9.

M. C. Escher's Legacy: A Centennial Celebration, edited by Doris Schattschneider and Michele Emmer. Springer, September 2005 (paperback edition). ISBN 3-540-20100-9.

The Essential Turing, edited by B. Jack Copeland. Oxford University Press, September 2004. ISBN 0-198-25080-0. (Reviewed November 2006.)

Euclid in the Rainforest: Discovering Universal Truths in Logic and Math, by Joseph Mazur. Pi Press, October 2004. ISBN 0-131-47994-6.

Euler through Time: A New Look at Old Themes, by V. S. Varadarajan. AMS, June 2006. ISBN 0-8218-3580-7.

God Created the Integers, by Stephen Hawking. Running Press, October 2005. ISBN 0-762-41922-9.

Gödel's Theorem: An Incomplete Guide to Its Use and Abuse, by Torkel Franzen. A K Peters, May 2005. ISBN 1-56881-238-8.

Hiding in the Mirror: The Mysterious Allure of Extra Dimensions, from Plato to String Theory and Beyond, by Lawrence M. Krauss. Viking Adult, October 2005. ISBN 0-670-03395-2.

Incompleteness: The Proof and Paradox of Kurt Gödel, by Rebecca Goldstein. W. W. Norton, February 2005. ISBN 0-393-05169-2. (Reviewed April 2006.)

Infinite Ascent: A Short History of Mathematics, by David Berlinski. Modern Library, September 2005. ISBN 0-679-64234-X.

The Infinite Book: A Short Guide to the Boundless, Timeless and Endless, by John D. Barrow. Pantheon, August 2005. ISBN 0-375-42227-7.

It's About Time: Understanding Einstein's Relativity, by N. David Mermin. Princeton University Press, September 2005. ISBN 0-691-12201-6.

King of Infinite Space: Donald Coxeter, the Man Who Saved Geometry, by Siobhan Roberts. Walker and Company, September 2006. ISBN 0-802-71499-4.

The Lifebox, the Seashell, and the Soul: What Gnarly Computation Taught Me about Ultimate Reality, the Meaning of Life, and How to Be Happy, by Rudy Rucker. Thunder's Mouth Press, October 2005. ISBN 1-560-25722-9.

A Madman Dreams of Turing Machines, by Janna Levin. Knopf, August 2006. ISBN 1-400-04030-2.

The Man Who Knew Too Much: Alan Turing and the Invention of the Computer, by David Leavitt. Great Discoveries series, W. W. Norton, December 2005. ISBN 0-393-05236-2. (Reviewed November 2006.)

The Math Instinct: Why You're a Mathematical Genius (Along with Lobsters, Birds, Cats, and Dogs), by Keith Devlin. Thunder's Mouth Press, March 2005. ISBN 1-56025-672-9.

Mathematical Musings: A Collection of Quotes, edited by Dan Sonnenschein. Clarium Press, November 2005. ISBN 0-9697688-8-5.

Meta Math! The Quest for Omega, by Gregory Chaitin. Pantheon, October 2005. ISBN 0-375-42313-3.

REFERENCE & BOOK LIST

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

*Musimathics: The Mathematical Foundations of Music, Volume 1, by Gareth Loy. MIT Press, September 2006. ISBN 0-262-12282-0.

Mystic, Geometer, and Intuitionist: The Life of L. E. J. Brouwer. Volume 2: Hope and Disillusion, by Dirk van Dalen. Oxford University Press, October 2005. ISBN 0-198-51620-7.

New Mexico Mathematics Contest Problem Book, by Liong-shin Hahn. University of New Mexico Press, November 2005. ISBN 0-8263-3534-9.

The Newtonian Moment: Isaac Newton and the Making of Modern Culture, by Mordechai Feingold. New York Library and Oxford University Press, December 2004. ISBN 0-195-17735-5.

Not Even Wrong: The Failure of String Theory and the Continuing Challenge to Unify the Laws of Physics, by Peter Woit. Jonathan Cape, April 2006. ISBN 0-224-07605-1.

*Once Upon Einstein, by Thibault D'Amour. A K Peters, March 2006. ISBN 1-568-81289-2.

The Pea and the Sun: A Mathematical Paradox, by Leonard M. Wapner. A K Peters, April 2005. ISBN 1-568-81213-2. (Reviewed October 2006.)

Piano Hinged Dissections: Time to Fold!, by Greg Frederickson. AK Peters, October 2006. ISBN 1-56881-299-X.

Piero della Francesca: A Mathematician's Art, by J. V. Field. Yale University Press, August 2005. ISBN 0-300-10342-5.

PopCo, by Scarlett Thomas. Harvest Books, October 2005. ISBN 0-156-03137-X. (Reviewed February 2006.)

Probability Theory: The Logic of Science, by E. T. Jaynes. Edited by G. Larry Bretthorst. Cambridge University Press, April 2003. ISBN 0-521-59271-2. (Reviewed January 2006.)

*Pursuit of Genius: Flexner, Einstein, and the Early Faculty at the Institute for Advanced Study, by Steve Batterson. AK Peters, June 2006. ISBN 1-56881-259-0.

Reality Conditions: Short Mathematical Fiction, by Alex Kasman. Mathematical Association of America, May 2005. ISBN 0-88385-552-6. (Reviewed August 2006.)

Reflections: V. I. Arnold's Reminiscences, by V. I. Arnold. Springer, April 2006. ISBN 3-540-28734-5.

The Road to Reality: A Complete Guide to the Laws of the Universe, by Roger Penrose. Knopf, February 2005. ISBN 0-679-45443-8. (Reviewed June/July 2006.)

The Secret Life of Numbers: 50 Easy Pieces on How Mathematicians Work and Think, by George G. Szpiro. Joseph Henry Press, March 2006. ISBN 0-309-09658-8.

Shadows of Reality: The Fourth Dimension in Relativity, Cubism, and Modern Thought, by Tony Robbin. Yale University Press, March 2006. ISBN 0-300-11039-1.

*The Shoelace Book: A Mathematical Guide to the Best (And Worst) Ways to Lace Your Shoes, by Burkard Polster. AMS, June 2006. ISBN 0-821-83933-0. (Reviewed in this issue.)

Stalking the Riemann Hypothesis: The Quest to Find the Hidden Law of Prime Numbers, by Dan Rockmore. Pantheon, April 2005. ISBN 0-375-42136-X. (Reviewed September 2006.)

Symmetry and the Monster: The Story of One of the Greatest Quests of Mathematics, by Mark Ronan. Oxford University Press, May 2006. ISBN 0-192-80722-6.

The Three Body Problem, by Catherine Shaw. Allison and Busby, March 2005. ISBN 0-749-08347-6. (Reviewed October 2006.)

*The Trouble With Physics: The Rise of String Theory, The Fall of a Science, and What Comes Next, by Lee Smolin. Joseph Henry Press, October 2006. ISBN 0-309-10192-1.

Unknown Quantity: A Real and Imaginary History of Algebra, by John Derbyshire. Joseph Henry Press, May 2006. ISBN 0-309-09657-X.

Yearning for the Impossible: The Surprising Truths of Mathematics, by John Stillwell. AK Peters, May 2006. ISBN 1-568-81254-X.