

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.wustl.edu in the case of the editor and notices@ams.org in the case of the managing editor. The fax numbers are 314-935-6839 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

March 30, 2012: Applications for AMS-Simons Travel Grants for Early-Career Mathematicians. See www.ams.org/programs/travel-grants/AMS-SimonsTG.

March 31, 2012: Nominations for prizes of the Academy of Sciences for the Developing World (TWAS). Send nominations to TWAS Prizes, International Centre for Theoretical Physics (ICTP) Campus, Strada Costiera 11, 1-34151 Trieste, Italy; fax: 39 040 2240 7387; email: prizes@twas.org. See <http://www.twas.org/>.

April 9, 2012: Applications for Math for America San Diego site. See the website at <http://www.mathforamerica.org/>.

April 13, 2012: Applications for Project NExT: New Experiences in Teaching fellowships. See "Mathematics Opportunities" in this issue.

April 13, 2012: Proposals for 2013 NSF-CBMS Regional Conferences. See "Mathematics Opportunities" in this issue.

April 15, 2012: Applications for fall 2012 semester of Math in Moscow. See "Mathematics Opportunities" in this issue.

April 30, 2012: Nominations for AWM Gweneth Humphreys Award. See "Mathematics Opportunities" in this issue.

May 1, 2012: Letters of intent for NSF Integrative Graduate Education and Research Training (IGERT) program. See "Mathematics Opportunities" in this issue.

May 1, 2012: Applications for National Academies Research Associateship Programs. See http://sites.nationalacademies.org/PGA/RAP/PGA_050491 or contact Research Associateship Programs, National Research Council, Keck 568, 500 Fifth Street, NW, Washington, DC 20001; telephone 202-334-2760; fax 202-334-2759; email rap@nas.edu.

May 1, 2012: Applications for National Academies Christine Mirzayan Graduate Fellowship Program for fall 2012. See the website <http://sites.nationalacademies.org/PGA/policyfellows/index.htm> or contact The National Academies Christine Mirzayan Science and Technology Policy Graduate Fellowship Program, 500 Fifth Street, NW, Room 508, Washington, DC 20001; telephone: 202-334-2455; fax: 202-334-1667; email: policyfellows@nas.edu.

May 1, 2012, October 1, 2012: Applications for AWM Travel Grants.

Where to Find It

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

AMS Bylaws—January 2012, p. 73

AMS Email Addresses—February 2012, p. 328

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

AMS Officers 2010 and 2011 Updates—May 2011, p. 735

AMS Officers and Committee Members—October 2011, p. 1311

Conference Board of the Mathematical Sciences—September 2011, p. 1142

IMU Executive Committee—December 2011, p. 1606

Information for Notices Authors—June/July 2011, p. 845

Mathematics Research Institutes Contact Information—August 2011, p. 973

National Science Board—January 2012, p. 68

NRC Board on Mathematical Sciences and Their Applications—March 2012, p. 444

NRC Mathematical Sciences Education Board—April 2011, p. 619

NSF Mathematical and Physical Sciences Advisory Committee—February 2011, p. 329

Program Officers for Federal Funding Agencies—October 2011, p. 1306 (DoD, DoE); December 2011, page 1606 (NSF Mathematics Education)

Program Officers for NSF Division of Mathematical Sciences—November 2011, p. 1472

See <http://www.awm-math.org/travelgrants.html#standard>; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030; 703-934-0163; awm@awm-math.org.

May 15–June 15, 2012: Proposals for NSF DMS Workforce Program in the Mathematical Sciences. See “Mathematics Opportunities” in this issue.

July 2, 2012: Full proposals for NSF Integrative Graduate Education and Research Training (IGERT) program. See “Mathematics Opportunities” in this issue.

July 10, 2012: Full proposals for NSF Research Networks in the Mathematical Sciences. See http://www.nsf.gov/pubs/2010/nsf10584/nsf10584.htm?WT.mc_id=USNSF_25&WT.mc_ev=click.

August 1, 2012, November 1, 2012: Applications for National Academies Research Associateship Programs. See http://sites.nationalacademies.org/PGA/RAP/PGA_050491 or contact Research Associateship Programs, National Research Council, Keck 568, 500 Fifth Street, NW, Washington, DC 20001; telephone 202-334-2760; fax 202-334-2759; email rap@nas.edu.

August 14, 2012: Full proposals for NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program. See “Mathematics Opportunities” in this issue.

September 15, 2012: Applications for spring 2013 semester of Math in Moscow. See “Mathematics Opportunities” in this issue.

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.*

The Adventure of Reason: Interplay between Philosophy of Mathematics and Mathematical Logic, 1900–1940, by Paolo Mancosu. Oxford University Press, January 2011. ISBN-13: 978-01995-465-34.

At Home with André and Simone Weil, by Sylvie Weil. (Translation of *Chez les Weils*, translated by Benjamin Ivry.) Northwestern University Press, October 2010. ISBN-13: 978-08101-270-43. (Reviewed May 2011.)

The Autonomy of Mathematical Knowledge: Hilbert’s Program Revisited, by Curtis Franks. Cambridge University Press, December 2010. ISBN-13: 978-05211-838-95.

The Beginning of Infinity: Explanations That Transform the World, by David Deutsch. Viking Adult, July 2011. ISBN-13: 978-06700-227-55. (Reviewed in this issue.)

The Best Writing on Mathematics: 2010, edited by Mircea Pitici. Princeton University Press, December 2010. ISBN-13: 978-06911-484-10. (Reviewed November 2011.)

The Big Questions: Mathematics, by Tony Crilly. Quercus, April 2011. ISBN-13: 978-18491-624-01.

The Blind Spot: Science and the Crisis of Uncertainty, by William Byers. Princeton University Press, April 2011. ISBN-13: 978-06911-468-43.

The Calculus Diaries: How Math Can Help You Lose Weight, Win in Vegas, and Survive a Zombie Apocalypse, by Jennifer Ouellette. Penguin, reprint edition, August 2010. ISBN-13: 978-01431-173-77.

The Calculus of Selfishness, by Karl Sigmund. Princeton University Press, January 2010. ISBN-13: 978-06911-427-53. (Reviewed January 2012.)

Chasing Shadows: Mathematics, Astronomy, and the Early History of Eclipse Reckoning, by Clemency Montelle. Johns Hopkins University Press, April 2011. ISBN-13: 978-08018-969-10. (Reviewed March 2012.)

Crafting by Concepts: Fiber Arts and Mathematics, by Sarah-Marie Belcastro and Carolyn Yackel. A K Peters/CRC Press, March 2011. ISBN-13: 978-15688-143-53.

**The Crest of the Peacock: Non-European Roots of Mathematics*, by

George Gheverghese Joseph. Third edition. Princeton University Press, October 2010. ISBN: 978-0-691-13526-7.

Cycles of Time: An Extraordinary New View of the Universe, by Roger Penrose. Knopf, May 2011. ISBN-13: 978-03072-659-06.

Divine Machines: Leibniz and the Sciences of Life, by Justin E. H. Smith. Princeton University Press, May 2011. ISBN-13: 978-06911-417-87.

An Early History of Recursive Functions and Computability from Gödel to Turing, by Rod Adams. Docent Press, May 2011. ISBN-13: 978-09837-004-01.

Emmy Noether’s Wonderful Theorem, by Dwight E. Neuenschwander. Johns Hopkins University Press, November 2010. ISBN-13: 978-08018-969-41.

The Evolution of Logic, by W. D. Hart. Cambridge University Press, August 2010. ISBN-13: 978-0-521-74772-1

**Experimental and Computational Mathematics: Selected Writings*, by Jonathan Borwein and Peter Borwein. PSiPress, 2011. ISBN: 978-19356-380-56.

**Excursions in the History of Mathematics*, by Israel Kleiner. Birkhäuser, 2012. ISBN-13: 978-08176-826-75.

Fascinating Mathematical People: Interviews and Memoirs, edited by Donald J. Albers and Gerald L. Alexanderson. Princeton University Press, October 2011. ISBN: 978-06911-482-98.

Gottfried Wilhelm Leibniz: The Polymath Who Brought Us Calculus, by M. B. W. Tent. A K Peters/CRC Press, October 2011. ISBN: 978-14398-922-20.

The History and Development of Nomography, by H. A. Evesham. Docent Press, December 2010. ISBN-13: 978-14564-796-26.

Hot X: Algebra Exposed, by Danica McKellar. Hudson Street Press, August 2010. ISBN-13: 978-15946-307-05.

In Pursuit of the Unknown: 17 Equations that Changed the World, by Ian Stewart. Basic Books, March 2012. ISBN-13: 978-04650-297-30.

**In Service to Mathematics: The Life and Work of Mina Rees*, by Amy Shell-Gellasch. Docent Press, December 2010. ISBN: 978-0-9837004-1-8.

The Information: A History, a Theory, a Flood, by James Gleick.

Pantheon, March 2011. ISBN-13: 978-03754-237-27.

Knots Unravelled: From String to Mathematics, by Meike Akveld and Andrew Jobbings. Arbelos, October 2011. ISBN: 978-09555-477-20.

Le Operazioni del Calcolo Logico, by Ernst Schröder. Original German version of Operationskreis des Logikkalkuls and Italian translation with commentary and annotations by Davide Bondoni. LED Online, 2010. ISBN-13: 978-88-7916-474-0.

**Lost in a Cave: Applying Graph Theory to Cave Exploration*, by Richard L. Breisch. National Speleological Society, January, 2012. ISBN: 978-1-879961-43-2.

**The Lost Millennium: History's Timetables Under Siege*, by Florin Diacu. Johns Hopkins University Press (second edition), November 2011. ISBN-13: 978-14214-028-88.

Magical Mathematics: The Mathematical Ideas that Animate Great Magic Tricks, by Persi Diaconis and Ron Graham. Princeton University Press, November 2011. ISBN: 978-06911-516-49.

Mathematics and Reality, by Mary Leng. Oxford University Press, June 2010. ISBN-13: 978-01992-807-97.

Mathematics Education for a New Era: Video Games as a Medium for Learning, by Keith Devlin. A K Peters/CRC Press, February 2011. ISBN-13: 978-1-56881-431-5.

The Mathematics of Life, by Ian Stewart. Basic Books, June 2011. ISBN-13: 978-04650-223-80. (Reviewed December 2011.)

Mathematics, Religion and Ethics: An Epistemological Study, by Salilesh Mukhopadhyay. Feasible Solution LLC, September 2010. ISBN: 978-1-4507-3558-2.

Mysteries of the Equilateral Triangle, by Brian J. McCartin. Hikari, August 2010. ISBN-13: 978-954-91999-5-6. Electronic copies available for free at <http://www.m-hikari.com/mccartin-2.pdf>.

NIST Handbook of Mathematical Functions, Cambridge University Press, Edited by Frank W. J. Olver, Daniel W. Lozier, Ronald F. Boisvert, and Charles W. Clark. Cambridge University Press, May 2010. ISBN-13: 978-05211-922-55 (hardback plus CD-ROM); ISBN-13: 978-05211-406-38

(paperback plus CD-ROM). (Reviewed September 2011.)

The Noether Theorems: Invariance and Conservation Laws in the Twentieth Century, by Yvette Kosmann-Schwarzbach. Springer, December 2010. ISBN-13: 978-03878-786-76.

Numbers: A Very Short Introduction, by Peter M. Higgins. Oxford University Press, February 2011. ISBN 978-0-19-958405-5. (Reviewed January 2012.)

One, Two, Three: Absolutely Elementary Mathematics [Hardcover] David Berlinski. Pantheon, May 2011. ISBN-13: 978-03754-233-38.

Origami Inspirations, by Meenakshi Mukerji. A K Peters, September 2010. ISBN-13: 978-1568815848.

The Perfect Swarm: The Science of Complexity in Everyday Life, by Len Fisher. Basic Books, March 2011 (paperback). ISBN-13: 978-04650-202-49.

The Philosophy of Mathematical Practice, Paolo Mancosu, Editor. Oxford University Press, December 2011. ISBN: 978-01996-401-02. (Reviewed March 2012.)

The Proof is in the Pudding: A Look at the Changing Nature of Mathematical Proof, by Steven G. Krantz. Springer, May 2011. ISBN: 978-03874-890-87.

Proofiness: The Dark Arts of Mathematical Deception, by Charles Seife. Viking, September 2010. ISBN-13: 978-06700-221-68.

The Quants: How a New Breed of Math Whizzes Conquered Wall Street and Nearly Destroyed It, by Scott Patterson. Crown Business, January 2011. ISBN-13: 978-03074-533-89. (Reviewed May 2011.)

Roads to Infinity: The Mathematics of Truth and Proof, by John C. Stillwell. A K Peters/CRC Press, July 2010. ISBN-13: 978-15688-146-67.

**Scientific Reflections: Selected Multidisciplinary Works*, by Richard Crandall. PSiPress, 2011. ISBN: 978-19356-380-87.

**Six Gems of Geometry*, by Thomas Reale. PSiPress, 2010. ISBN: 978-19356-380-25.

Street-Fighting Mathematics: The Art of Educated Guessing and Opportunistic Problem Solving, by Sanjoy Mahajan. MIT Press, March 2010. ISBN-13: 978-0-262-51429-3. (Reviewed August 2011.)

Survival Guide for Outsiders: How to Protect Yourself from Politicians,

Experts, and Other Insiders, by Sherman Stein. BookSurge Publishing, February 2010. ISBN-13: 978-14392-532-74.

**Taking Sudoku Seriously: The Math Behind the World's Most Popular Pencil Puzzle*, by Jason Rosenhouse and Laura Taalman. Oxford University Press, January 2012. ISBN: 978-01997-565-68.

The Theory That Would Not Die: How Bayes' Rule Cracked the Enigma Code, Hunted Down Russian Submarines, and Emerged Triumphant from Two Centuries of Controversy, by Sharon Bertsch McGrayne. Yale University Press, April 2011. ISBN-13: 978-03001-696-90.

Top Secret Rosies: The Female Computers of World War II. Video documentary, produced and directed by LeAnn Erickson. September 2010. Website: <http://www.topsecretrosies.com>. (Reviewed February 2012.)

Towards a Philosophy of Real Mathematics, by David Corfield. Oxford University Press, April 2003. ISBN-13: 0-521-81722-6. (Reviewed November 2011.)

Train Your Brain: A Year's Worth of Puzzles, by George Grätzer. A K Peters/CRC Press, April 2011. ISBN-13: 978-15688-171-01.

Viewpoints: Mathematical Perspective and Fractal Geometry in Art, by Marc Frantz and Annalisa Crannell. Princeton University Press, August 2011. ISBN-13: 978-06911-259-23.

**Vilim Feller, istaknuti hrvatsko-americki matematičar/William Feller, Distinguished Croatian-American Mathematician*, by Darko Zubrinic. Bilingual Croatian-English edition, Graphis, 2011. ISBN: 978-953-279-016-0.

Visual Thinking in Mathematics, by Marcus Giaquinto. Oxford University Press, July 2011. ISBN-13: 978-01995-755-34.

What's Luck Got to Do with It? The History, Mathematics and Psychology of the Gambler's Illusion, by Joseph Mazur. Princeton University Press, July 2010. ISBN: 978-0-691-13890-9. (Reviewed February 2012.)

Why Beliefs Matter: Reflections on the Nature of Science, by E. Brian Davies. Oxford University Press, June 2010. ISBN13: 978-01995-862-02. (Reviewed in this issue.)