

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

February 15, 2012: Applications for AMS Congressional Fellowship. See <http://www.ams.org/programs/ams-fellowships/ams-aaas/ams-aaas-congressional-fellowship> or contact the AMS Washington Office at 202-588-1100; amsdc@ams.org.

March 1, 2012: Applications for Summer Program for Women in Mathematics (SPWM). Contact the director, Murli M. Gupta, email: mmg@gwu.edu; telephone: 202-994-4857; or visit the

program's website at <http://www.gwu.edu/~spwm/>.

March 30, 2012: Applications for AMS-Simons Travel Grants for Early-Career Mathematicians. See "Mathematics Opportunities" in this issue.

March 31, 2012: Nominations for prizes of the Academy of Sciences for the Developing World (TWAS). See "Mathematics Opportunities" in this issue.

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

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: Applications for AWM Travel Grants. 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.

Where to Find It

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

AMS Bylaws—November 2009, p. 1320

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

New Journals for 2008—June/July 2009, p. 751

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

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: 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.

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

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.

Board on Mathematical Sciences and Their Applications, National Research Council

The Board on Mathematical Sciences and Their Applications (BMSA) was established in November 1984 to lead activities in the mathematical sciences at the National Research Council (NRC). The mission of BMSA is to support and promote the quality and health of the mathematical sciences and their benefits to the nation. Following are the current BMSA members.

Tanya Styblo Beder, SB Consulting Corporation

Patricia Brennan, University of Wisconsin

Gerald G. Brown, Naval Postgraduate School

Ricardo Caballero, Massachusetts Institute of Technology

L. Anthony Cox, Cox Associates, Inc.

Brenda Dietrich, IBM Thomas J. Watson Research Center

Constantine Gatsonis, Brown University

Darryll Hendricks, UBS Investment Bank

Kenneth L. Judd, Stanford University

C. David Levermore (Chair), University of Maryland

David Maier, Portland State University

James C. McWilliams, University of California, Los Angeles

Juan C. Meza, University of California, Merced

John W. Morgan, Stony Brook University

Vijayan N. Nair, University of Michigan

Claudia Neuhauser, University of Minnesota

J. Tinsley Oden, University of Texas at Austin

Donald Saari, University of California at Irvine

J. B. Silvers, Case Western Reserve University

George Sugihara, University of California, San Diego

Eva Tardos, Cornell University

Karen L. Vogtmann, Cornell University

Bin Yu, University of California, Berkeley

The postal address for BMSA is: Board on Mathematical Sciences and Their Applications, National Academy of Sciences, Room K974, 500 Fifth Street, NW, Washington, DC 20001; telephone: 202-334-2421; fax: 202-334-2422; email: bms@nas.edu; website: http://sites.nationalacademies.org/DEPS/BMSA/DEPS_047709.

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.

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 in this issue.)

The Clockwork Universe: Isaac Newton, the Royal Society, and the Birth of the Modern World, by Edward Dolnick. Harper, February 2011. ISBN-13: 978-00617-195-16.

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.

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

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. AK Peters/CRC Press, October 2011. ISBN: 978-14398-922-20.

Hidden Harmonies (The Lives and Times of the Pythagorean Theorem), by Robert and Ellen Kaplan. Bloomsbury Press, January 2011. ISBN-13: 978-15969-152-20.

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.

The Information: A History, a Theory, a Flood, by James Gleick. Pantheon, March 2011. ISBN-13: 978-03754-237-27.

Knots Unravalled: 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 Logikkalküls and Italian translation with commentary and annotations by Davide Bondoni. LED Online, 2010. ISBN-13: 978-88-7916-474-0.

Loving + Hating Mathematics: Challenging the Myths of Mathematical Life, by Reuben Hersh and Vera John-Steiner. Princeton University Press, January 2011. ISBN-13: 978-06911-424-70.

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 in this issue.)

Problem-Solving and Selected Topics in Number Theory in the Spirit of the Mathematical Olympiads, by Michael Th. Rassias. Springer, 2011. ISBN-13: 978-1-4419-0494-2.

Proof and Other Dilemmas: Mathematics and Philosophy, edited by Bonnie Gold and Roger A. Simons. Mathematical Association of America, July 2008. ISBN-13: 978-08838-556-76. (Reviewed December 2011.)

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.

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.

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.

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.

Classified Advertisements

HOME RENTALS AND SWAPS

HOME RENTALS AND SWAPS

SabbaticalHomes.com. Do you have a home to rent? Are you looking for housing while on sabbatical? We are the academic community's resource for home rentals and home swaps worldwide.

000019

CHILE

PONTIFICIA UNIVERSIDAD CATOLICA DE CHILE

Department of Mathematics

The Department of Mathematics invites applications for three tenure-track positions at the Assistant Professor level beginning either March or August 2013. Applicants should have a Ph.D. in mathematics, proven research potential either in pure or applied mathematics, and a strong commitment to teaching and research. The regular teaching load for assistant professors consists of three one-semester courses per year, reduced to two during the first two years. The annual salary will be US\$47,000 (calculated at the current

exchange rate of 500 Chilean pesos per dollar).

Please send a letter indicating your main research interests, potential collaborators in our department (www.mat.puc.cl), detailed curriculum vitae, and three letters of recommendation to:

Monica Musso
Director
Pontificia Universidad Católica de Chile
Av. Vicuña Mackenna 4860
Santiago, Chile;
fax: (56-2) 552-5916;
email: mmusso@mat.puc.cl

For full consideration, complete application materials must arrive by June 30, 2012.

000023

Suggested uses for classified advertising are positions available, books or lecture notes for sale, books being sought, exchange or rental of houses, and typing services.

The 2011 rate is \$3.25 per word. No discounts for multiple ads or the same ad in consecutive issues. For an additional \$10 charge, announcements can be placed anonymously. Correspondence will be forwarded.

Advertisements in the "Positions Available" classified section will be set with a minimum one-line headline, consisting of the institution name above body copy, unless additional headline copy is specified by the advertiser. Headlines will be centered in boldface at no extra charge. Ads will appear in the language in which they are submitted.

There are no member discounts for classified ads. Dictation over the telephone will not be accepted for classified ads.

Upcoming deadlines for classified advertising are as follows: April 2012 issue—January 30, 2012; May 2012 issue—February 28, 2012; June/July 2012 issue—April

30, 2012; August 2012 issue—May 29, 2012; September 2012 issue—June 28, 2012; October 2012 issue—July 26, 2012.

U.S. laws prohibit discrimination in employment on the basis of color, age, sex, race, religion, or national origin. "Positions Available" advertisements from institutions outside the U.S. cannot be published unless they are accompanied by a statement that the institution does not discriminate on these grounds whether or not it is subject to U.S. laws. Details and specific wording may be found on page 667 (vol. 56).

Situations wanted advertisements from involuntarily unemployed mathematicians are accepted under certain conditions for free publication. Call toll-free 800-321-4AMS (321-4267) in the U.S. and Canada or 401-455-4084 worldwide for further information.

Submission: Promotions Department, AMS, P.O. Box 6248, Providence, Rhode Island 02940; or via fax: 401-331-3842; or send email to classified@ams.org. AMS location for express delivery packages is 201 Charles Street, Providence, Rhode Island 02904. Advertisers will be billed upon publication.