

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 smf@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.

Information for Notices Authors

The Notices welcomes unsolicited articles for consideration for publication, as well as proposals for such articles. The following provides general guidelines for writing Notices articles and preparing them for submission. Contact information for Notices editors and staff may be found on the Notices website, <http://www.ams.org/notices>.

Upcoming Deadlines

February 25, 2013: Applications for EDGE Summer Program. See <http://www.edgeforwomen.org/>.

February 28, 2013: Nominations for TWAS Prizes. See "Mathematics Opportunities" in this issue.

March 1, 2013: Applications for 2013 Summer Program for Women in Mathematics (SPWM). Contact the director, Murli M. Gupta, email: mmg@gwu.edu; telephone: 202-994-4857; or see the website <http://www.gwu.edu/~spwm/>.

March 18, 2013: Registration for CRM International School and Research Workshop on Complex Systems. See the website <http://www.crm.cat/en/Activities/Pages/ActivityDescriptions/International-School-and-Research-Workshop-on-Complex-systems.aspx>.

March 31, 2013: Nominations for CMS Graham Wright Award for Distinguished Service. See "Mathematics Opportunities" in this issue.

March 31, 2013: Applications for AMS-Simons Travel Grants. See

www.ams.org/programs/travel-grants/AMS-SimonsTG or contact Steven Ferrucci, email: ams-simons@ams.org, telephone: 800-321-4267, ext. 4113.

March 31, 2013: Applications for IPAM graduate summer school on computer vision. See www.ipam.ucla.edu.

April 1, 2013: Letters of intent for proposals for one-semester programs at the Bernoulli Center (CIB). See the website <http://cib.epfl.ch/>.

April 15, 2013: Applications for fall 2013 semester of Math in Moscow. See <http://www.mccme.ru/mathinmoscow>, or write to: Math in Moscow, P.O. Box 524, Wynnewood, PA 19096; fax: +7095-291-65-01; e-mail: mim@mccme.ru. Information and application forms for the AMS scholarships are available on the AMS website at <http://www.ams.org/programs/travel-grants/mimoscow>, or by writing to: Math in Moscow Program, Membership

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 2013, p. 249

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

AMS Officers 2010 and 2011 Updates—May 2012, p. 708

AMS Officers and Committee Members—October 2012, p. 1290

Contact Information for Mathematical Institutes—August 2012, p. 979

Conference Board of the Mathematical Sciences—September 2012, p. 1128

IMU Executive Committee—December 2011, p. 1606

Information for Notices Authors—June/July 2012, p. 851

Mathematics Research Institutes Contact Information—August 2012, p. 979

National Science Board—January 2013, p. 109

NRC Board on Mathematical Sciences and Their Applications—March 2013, p. 350

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

NSF Mathematical and Physical Sciences Advisory Committee—February 2013, p. 252

Program Officers for Federal Funding Agencies—October 2012, p. 1284 (DoD, DoE); December 2012, p. 1585 (NSF Mathematics Education)

Program Officers for NSF Division of Mathematical Sciences—November 2012, p. 1469

and Programs Department, American Mathematical Society, 201 Charles Street, Providence RI 02904-2294; email student-serv@ams.org.

May 1, 2013: Applications for May review for National Academies Research Associateship Programs. See the website 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, 2013: Applications for AWM Travel Grants and Mathematics Education Research Travel Grants. See <https://sites.google.com/site/awmmath/programs/travel-grants>; or telephone: 703-934-0163; email: awm@awm-math.org; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

August 1, 2013: Applications for August review for National Academies Research Associateship Programs. See the website 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, 2013: Applications for AWM Travel Grants and Mathematics Education Research Travel Grants. See <https://sites.google.com/site/awmmath/programs/travel-grants>; or telephone: 703-934-0163; email: awm@awm-math.org; or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

October 4, 2013: Letters of intent for NSF Program ADVANCE Institutional Transformation and Institutional Transformation Catalyst awards. See http://www.nsf.gov/pubs/2012/nsf12584/nsf12584.htm?WT.mc_id=USNSF_36&WT.mc_ev=click.

November 1, 2013: Applications for November review for National Academies Research Associateship Programs. See the website 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.

November 12, 2013: Full proposals for NSF Program ADVANCE Institutional Transformation and Institutional Transformation Catalyst awards. See http://www.nsf.gov/pubs/2012/nsf12584/nsf12584.htm?WT.mc_id=USNSF_36&WT.mc_ev=click.

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.

Gerald G. Brown, Naval Postgraduate School

L. Anthony Cox Jr., Cox Associates, Inc.

Brenda Dietrich, IBM Thomas J. Watson Research Center

Constantine Gatsonis, Brown University

Darryll Hendricks, UBS Investment Bank

Andrew W. Lo, Massachusetts Institute of Technology Sloan School of Management

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

Fred S. Roberts, Rutgers University

Donald Saari, Chair, University of California at Irvine

Carl P. Simon, University of Michigan

J. B. Silvers, Case Western Reserve University

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 recent books that have mathematical themes and are aimed at a broad audience potentially including mathematicians, students, and the general public. 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.

Algorithmic Puzzles, by Anany Levitin and Maria Levitin. Oxford University Press, October 2011. ISBN-13: 978-01997-404-44.

American Mathematicians as Educators, 1893-1923: Historical Roots of the "Math Wars", by David Lindsay Roberts. Docent Press, July 2012, ISBN-13: 978-09837-004-49.

The Beginning of Infinity: Explanations That Transform the World, by David Deutsch. Viking Adult, July 2011. ISBN-13: 978-06700-227-55. (Reviewed April 2012.)

The Best Writing on Mathematics 2012, edited by Mircea Pitici. Princeton University Press, November 2012. ISBN-13: 978-06911-565-52.

Bibliography of Raymond Clare Archibald, by Scott Guthery. Docent Press, April 2012. ISBN-13: 978-0983700425.

The Big Questions: Mathematics, by Tony Crilly. Quercus, April 2011. ISBN: 978-18491-624-01. (Reviewed October 2012.)

Calculating Curves: The Mathematics, History, and Aesthetic Appeal of T. H. Gronwall's Nomographic Work,

by Thomas Hakon Gronwall, with contributions by Ron Doerfler and Alan Gluchoff, translation by Paul Hamburg, and bibliography by Scott Guthery. Docent Press, April 2012. ISBN-13: 978-09837-004-32.

Classic Problems of Probability, by Prakash Gorroochurn. Wiley, May 2012. ISBN: 978-1-1180-6325-5.

The Crest of the Peacock: Non-European Roots of Mathematics, by George Gheverghese Joseph. Third edition. Princeton University Press, October 2010. ISBN-13: 978-0-691-13526-7.

The Crossing of Heaven: Memoirs of a Mathematician, by Karl Gustafson. Springer, January 2012. ISBN-13: 978-36422-255-74.

Elliptic Tales: Curves, Counting, and Number Theory, by Avner Ash and Robert Gross. Princeton University Press, March 2012. ISBN-13: 978-06911-511-99.

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

Experimental and Computational Mathematics: Selected Writings, by Jonathan Borwein and Peter Borwein. PSi Press, 2011. ISBN-13: 978-19356-380-56.

The Foundations of Geometry And Religion From An Abstract Standpoint, by Salilesh Mukhopadhyay. Outskirts Press, July 2012. ISBN: 978-1-4327-9424-8.

**The Fractalist: Memoir of a Scientific Maverick*, by Benoit Mandelbrot. Pantheon, October 2012. ISBN-13: 978-03073-773-57.

Galileo's Muse: Renaissance Mathematics and the Arts, by Mark Austin-Peterson. Harvard University Press, October 2011. ISBN-13: 978-06740-597-26. (Reviewed November 2012.)

Game Theory and the Humanities: Bridging Two Worlds, by Steven J. Brams. MIT Press, September 2012. ISBN-13: 978-02625-182-53.

Games and Mathematics: Subtle Connections, by David Wells. Cambridge University Press, November 2012. ISBN-13: 978-11076-909-12.

Gösta Mittag-Leffler: A Man of Conviction, by Arild Stubhaug (translated by Tiina Nunnally). Springer, November 2010. ISBN-13: 978-36421-167-11.

Guesstimation 2.0: Solving Today's Problems on the Back of a Napkin, by Lawrence Weinstein. Princeton Uni-

versity Press, September 2012. ISBN: 978-06911-508-02.

**Henri Poincaré: A Scientific Biography* by Jeremy Gray. Princeton University Press, November 2012. ISBN-13: 978-06911-527-14.

Henri Poincaré: Impatient Genius, by Ferdinand Verhulst. Springer, August 2012. ISBN: 978-14614-240-62.

In Pursuit of the Traveling Salesman: Mathematics at the Limits of Computation, by William J. Cook. Princeton University Press, December 2011. ISBN-13: 978-06911-527-07.

**I Died for Beauty: Dorothy Wrinch and the Cultures of Science*, by Marjorie Senechal. Oxford University Press, December 2012. ISBN-13: 978-01997-325-93.

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

In Service to Mathematics: The Life and Work of Mina Rees, by Amy Shell-Gellasch. Docent Press, December 2010. ISBN-13: 978-0-9837004-1-8.

Infinity: New Research Frontiers, edited by Michael Heller and W. Hugh Woodin. Cambridge University Press, February 2011. ISBN-13: 978-11070-038-73.

The Infinity Puzzle: Quantum Field Theory and the Hunt for an Orderly Universe, by Frank Close. Basic Books, November 2011. ISBN-13: 978-04650-214-44. (Reviewed September 2012.)

Introduction to Mathematical Thinking, by Keith Devlin. Keith Devlin, July 2012. ISBN-13: 978-06156-536-31.

The Irrationals: A Story of the Numbers You Can't Count On, by Julian Havil. Princeton University Press, June 2012. ISBN-13: 978-0691143422.

The Joy of x : A Guided Tour of Math, from One to Infinity, by Steven Strogatz. Eamon Dolan/Houghton Mifflin Harcourt, October 2012. ISBN-13: 978-05475-176-50.

Late Style: Yuri I. Manin Looking Back on a Life in Mathematics. A DVD documentary by Agnes Handwerk and Harrie Willems. Springer, March 2012. ISBN NTSC: 978-3-642-24482-7; ISBN PAL: 978-3-642-24522-0. (Reviewed January 2013.)

Lemmata: A Short Mathematical Thriller, by Sam Peng. CreateSpace,

December 2011. ISBN-13: 978-14681-442-39.

The Logician and the Engineer: How George Boole and Claude Shannon Created the Information Age, by Paul J. Nahin. Princeton University Press, October 2012. ISBN: 978-06911-510-07.

Lost in a Cave: Applying Graph Theory to Cave Exploration, by Richard L. Breisch. National Speleological Society, January 2012. ISBN-13: 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-13: 978-06911-516-49. (Reviewed August 2012.)

The Man of Numbers: Fibonacci's Arithmetic Revolution, by Keith Devlin. Walker and Company, July 2011. ISBN-13: 978-08027-781-23. (Reviewed May 2012.)

Math Girls, by Hiroshi Yuki (translated from the Japanese by Tony Gonzalez). Bento Books, November 2011. ISBN-13: 978-09839-513-15. (Reviewed August 2012.)

Math Goes to the Movies, by Burkard Polster and Marty Ross. Johns Hopkins University Press, July 2012. ISBN-13: 978-14214-048-44.

Math is Murder, by Robert C. Brigham and James B. Reed. Universe, March 2012. ISBN-13: 978-14697-972-81.

The Mathematical Writings of Évariste Galois, edited by Peter M. Neumann. European Mathematical Society, October 2011. ISBN-13: 978-3-03719-104-0. (Reviewed December 2012.)

Mathematical Excursions to the World's Great Buildings, by Alexander J. Hahn. Princeton University Press, July 2012. ISBN-13: 978-06911-452-04.

A Mathematician Comes of Age, by Steven G. Krantz. Mathematical Association of America, December 2011. ISBN-13: 978-08838-557-82.

Mathematicians in Bologna 1861-1960, edited by Salvatore Coen. ISBN: 978-30348-022-60.

Mathematics in Popular Culture: Essays on Appearances in Film, Fiction, Games, Television and Other Media, edited by Jessica K. Sklar and Elizabeth S. Sklar. McFarland, February 2012. ISBN-13: 978-07864-497-81.

Mathematics in Victorian Britain, by Raymond Flood, Adrian Rice, and Robin Wilson. Oxford University Press, October 2011. ISBN-13: 978-019-960139-4.

Meaning in Mathematics, edited by John Polkinghorne. Oxford University Press, July 2011. ISBN-13: 978-01996-050-57.

Measurement, by Paul Lockhart. Belknap Press of Harvard University Press, September 2012. ISBN-13: 978-06740-575-55.

Nine Algorithms That Changed the Future: The Ingenious Ideas That Drive Today's Computers, by John MacCormick. Princeton University Press, December 2011. ISBN-13: 978-06911-471-47.

Number-Crunching: Taming Unruly Computational Problems from Mathematical Physics to Science Fiction, by Paul J. Nahin. Princeton University Press, August 2011. ISBN: 978-06911-442-52.

On the Formal Elements of the Absolute Algebra, by Ernst Schröder (translated and with additional material by Davide Bondoni; with German parallel text). LED Edizioni Universitarie, 2012. ISBN: 978-88-7916-516-7.

Our Days Are Numbered: How Mathematics Orders Our Lives, by Jason Brown. Emblem Editions, April 2010. ISBN-13: 978-07710-169-74. (Reviewed October 2012.)

Paradoxes in Probability Theory, by William Eckhardt. Springer, September 2012. ISBN-13: 978-94007-513-92. (Reviewed in this issue.)

Pricing the Future: Finance, Physics, and the 300-Year Journey to the Black-Scholes Equation, by George G. Szpiro. Basic Books, November 2011. ISBN-13: 978-04650-224-89.

Proving Darwin: Making Biology Mathematical, by Gregory Chaitin. Pantheon, May 2012. ISBN: 978-03754-231-47.

Scientific Reflections: Selected Multidisciplinary Works, by Richard Crandall. PSIPress, 2011. ISBN-13: 978-19356-380-87.

**The Search for Certainty: A Journey Through the History of Mathematics, 1800-2000*, edited by Frank J. Swetz. Dover Publications, September 2012. ISBN-13: 978-04864-744-27.

Secrets of Triangles: A Mathematical Journey, by Alfred S. Posamentier and Ingmar Lehman. Prometheus Books, August 2012. ISBN-13: 978-16161-458-73.

Seduced by Logic: Emilie Du Châtelet, Mary Somerville and the Newtonian Revolution, by Robyn Arianrhod. Oxford University Press, September 2012. ISBN: 978-01999-316-13.

Selected Papers: Volume II: On Algebraic Geometry, including Correspondence with Grothendieck, by David Mumford. Edited by Amnon Neeman, Ching-Li Chai, and Takahiro Shiota. Springer, July 2010. ISBN-13: 978-03877-249-11. (Reviewed February 2013.)

**The Signal and the Noise: Why So Many Predictions Fail—but Some Don't* by Nate Silver. Penguin Press, September 2012. ISBN-13:978-15942-041-11.

Simon: The Genius in My Basement, by Alexander Masters. Delacorte Press, February 2012. ISBN-13: 978-03853-410-80.

Six Gems of Geometry, by Thomas Reale. PSIPress, 2010. ISBN-13: 978-19356-380-25.

Sources in the Development of Mathematics: Series and Products from the Fifteenth to the Twenty-first Century, by Ranjan Roy. Cambridge University Press, June 2011. ISBN-13: 978-05211-147-07.

A Strange Wilderness: The Lives of the Great Mathematicians, by Amir D. Aczel. Sterling, October 2011. ISBN-13: 978-14027-858-49.

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-13: 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. (Reviewed May 2012.)

**Thinking Statistically*, by Uri Bram. CreateSpace Independent Publishing Platform, January 2012. ISBN-13: 978-14699-123-32.

Transcending Tradition: Jewish Mathematicians in German Speaking Academic Culture, edited by Birgit Bergmann, Moritz Epple, and Ruti Ungar. Springer, January 2012. ISBN: 978-36422-246-38. (Reviewed February 2013.)

Turbulent Times in Mathematics: The Life of J. C. Fields and the History of the Fields Medal, by Elaine McKinnon Riehm and Frances Hoffman. AMS, November 2011. ISBN-13: 978-08218-691-47.

Uneducated Guesses: Using Evidence to Uncover Misguided Education Policies, by Howard Wainer. Princeton University Press, August 2011. ISBN-13: 978-06911-492-88. (Reviewed June/July 2012.)

The Universe in Zero Words: The Story of Mathematics as Told through Equations, by Dana Mackenzie. Princeton University Press, April 2012. ISBN-13: 978-06911-528-20. (Reviewed in this issue.)

Vilim Feller, istaknuti hrvatsko-americki matematičar/William Feller, Distinguished Croatian-American Mathematician, by Darko Zubrinic. Bilingual Croatian-English edition, Graphis, 2011. ISBN-13: 978-953-279-016-0.

A Wealth of Numbers: An Anthology of 500 Years of Popular Mathematics Writing, edited by Benjamin Wardhaugh. Princeton University Press, April 2012. ISBN-13: 978-06911-477-58. (Reviewed March 2013.)

Who's #1?: The Science of Rating and Ranking, by Amy N. Langville and Carl D. Meyer. Princeton University Press, February 2012. ISBN-13: 978-06911-542-20. (Reviewed January 2013.)

Why Beliefs Matter: Reflections on the Nature of Science, by E. Brian Davies. Oxford University Press, June 2010. ISBN-13: 978-01995-862-02. (Reviewed April 2012.)

Why Cats Land on Their Feet (and 76 Other Physical Paradoxes and Puzzles), by Mark Levi. Princeton University Press, May 2012. ISBN-13: 978-0691148540.