

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.

Upcoming Deadlines

April 30, 2013: Nominations for AWM Gweneth Humphreys Award. See www.awm-math.org, telephone 703-934-0163, or email awm@awm-math.org.

May 1, August 1, November 1, 2013: Applications for May, August, and November reviews 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, 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.

May 6, 2013: Applications for Math for America Master Teacher Fellowships in Berkeley, Boston, New York City, and Washington, DC, and for Early Career Fellowships in New York City. See "Mathematics Opportunities" in this issue.

May 15–June 15, 2013: Proposals for NSF DMS Workforce Program in the Mathematical Sciences. See the website [http://www.nsf.gov/](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503233)

[funding/pgm_summ.jsp?pims_id=503233](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503233).

June 4, 2013: Full proposals for National Science Foundation (NSF) Mentoring through Critical Transition Points in the Mathematical Sciences (MCTP) program. See "Mathematics Opportunities" in this issue.

June 4, 2013: Full proposals for National Science Foundation (NSF) Research Training Groups in the Mathematical Sciences (RTG) program. See "Mathematics Opportunities" in this issue.

August 13, 2013: Full proposals for NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program. See <http://www.nsf.gov/pubs/2012/nsf12529/nsf12529.htm>.

September 15, 2013: Applications for spring 2014 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;

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 2012 and 2013 Updates—*May 2013, p. 646*

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*

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National Science Board—*January 2013, p. 109*

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

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*

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

September 30, 2013: Nominations for W. K. Clifford Prize. See “Mathematics Opportunities” in this issue.

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.

October 16, 2013: Proposals for National Science Foundation (NSF) Postdoctoral Research Fellowships. See “Mathematics Opportunities” in this issue.

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.

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.

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.

Assessing the Reliability of Complex Models: Mathematical and Statistical Foundations of Verification, Validation, and Uncertainty Quantification, by the National Research Council. National Academies Press, 2012. ISBN: 978-0-309-25634-6.

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.

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.

**Charles S. Peirce on the Logic of Number*, by Paul Shields. Docent Press, October 2012. ISBN-13: 978-0-9837004-7-0.

Classic Problems of Probability, by Prakash Gorroochurn. Wiley, May 2012. ISBN-13: 978-1-1180-6325-5.

**The Continuity Debate: Dedekind, Cantor, du Bois-Reymond, and Peirce on Continuity and Infinitesimals*, by Benjamin Lee Buckley. Docent Press, December 2012. ISBN-13: 978-0-9837004-8-7.

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.

The Foundations of Geometry And Religion from an Abstract Standpoint, by Salilesh Mukhopadhyay. Outskirts Press, July 2012. ISBN-13: 978-1-4327-9424-8.

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

Fueling Innovation and Discovery: The Mathematical Sciences in the 21st Century, by the National Research Council. National Academies Press, 2012. ISBN-13: 978-0-309-25473-1.

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.

**Google’s PageRank and Beyond: The Science of Search Engine Rankings*, by Amy Langville and Carl Meyer. Princeton University Press, February 2012. ISBN-13: 978-06911-526-60.

**The Golden Ticket: P, NP, and the Search for the Impossible*, by Lance Fortnow. Princeton University Press, March 2013. ISBN-13: 978-06911-564-91.

Guesstimation 2.0: Solving Today’s Problems on the Back of a Napkin, by Lawrence Weinstein. Princeton University Press, September 2012. ISBN-13: 978-06911-508-02.

Henri Poincaré: Impatient Genius, by Ferdinand Verhulst. Springer, August 2012. ISBN-13: 978-14614-240-62.

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

How to Study as a Mathematician Major, by Lara Alcock. Oxford University Press, March 2013. ISBN-13: 978-0199661312.

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.

Ibn al-Haytham’s Theory of Conics, Geometrical Constructions and Practical Geometry, by Roshdi Rashed. Routledge, February 2013. ISBN: 978-0-415-58215-5.

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.)

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

**Invisible in the Storm: The Role of Mathematics in Understanding Weather*, by Ian Roulstone and John Norbury. Princeton University Press, February 2013. ISBN-13: 978-06911-527-21.

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.)

Levels of Infinity: Selected Writings on Mathematics and Philosophy, by Hermann Weyl. Edited by Peter Pesic. Dover Publications, February 2013. ISBN-13: 978-0486489032.

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-13: 978-06911-510-07.

Manifold Mirrors: The Crossing Paths of the Arts and Mathematics, by Felipe Cucker. Cambridge University Press, April 2013. ISBN-13: 978-0521728768.

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.

A Mathematician's Lament: How School Cheats Us Out of Our Most Fascinating and Imaginative Art Form, by Paul Lockhart. Bellvue Literary Press, April 2009. ISBN-13: 978-1-934137-17-8. (Reviewed April 2013.)

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

Mathematicians in Bologna 1861-1960, edited by Salvatore Coen. ISBN-13: 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.

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

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.

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-13: 978-88-7916-516-7.

Paradoxes in Probability Theory, by William Eckhardt. Springer, September 2012. ISBN-13: 978-94007-513-92. (Reviewed March 2013.)

**Peirce's Logic of Continuity: A Conceptual and Mathematical Approach*, by Fernando Zalamea. Docent Press, December 2012. ISBN-13: 978-0-9837004-9-4.

Proving Darwin: Making Biology Mathematical, by Gregory Chaitin. Pantheon, May 2012. ISBN-13: 978-03754-231-47.

**Relations Between Logic and Mathematics in the Work of Benjamin and Charles S. Peirce*, by Allison Walsh. Docent Press, October 2012. ISBN-13: 978-0-9837004-6-3.

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-13: 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.

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-13: 978-36422-246-38. (Reviewed February 2013.)

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.)

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

Classified Advertisements

Positions available, items for sale, services available, and more

MASSACHUSETTS

NORTHEASTERN UNIVERSITY Chair Department of Mathematics

The College of Science at Northeastern University invites applications for the position of Professor and Chair of the Mathematics Department. The Mathematics Department (www.math.neu.edu) at Northeastern is a center of excellence with a nationally and internationally recognized research faculty in pure and applied mathematics. The department currently comprises 34 full-time faculty with over \$4 million in annual federal funding, about 80 Ph.D. and Masters students, and about 240 undergraduate mathematics majors (including dual majors). At the core of the department are outstanding mathematical research in a broad range of areas, an excellent graduate program with diverse graduate offerings, a vibrant undergraduate program, and highly-regarded educational outreach programs. Key goals of the department include further enhancement of its research and graduate profile through high-level faculty and graduate student recruitment, and increasing its faculty and graduate representation in applied and interdisciplinary areas. The new Chair has a unique opportunity to significantly shape the department's future growth and direction.

The required qualifications include a Ph.D. degree in mathematics or a related field; a record of research, teaching and service appropriate for the academic rank of Full Professor of Mathematics; and demonstrated administrative, leadership, and interpersonal skills.

Northeastern University is a global, experiential research university. Grounded in its signature co-op program, Northeast-

ern today provides unprecedented experiential learning opportunities around the world. The university's rapidly growing research enterprise is strategically aligned with three national imperatives: health, security, and sustainability. Northeastern is in the process of hiring 300 new faculty. The incoming Chair will have an opportunity to contribute to this process.

Northeastern occupies a vibrant 67-acre campus in the heart of Boston, surrounded by other leading educational, health care, technological, and research institutions, as well as world-renowned venues for art and music. The campus has received an American Institute of Architects award for "most beautiful new or renovated exterior space". Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University. Northeastern University particularly welcomes applications from minorities, women, and persons with disabilities.

A competitive salary and startup package will be provided. To apply, visit "Careers at Northeastern" at <https://neu.peopleadmin.com>. Click on "Full-time Faculty Positions" and search for the current position under the College of Science. You can also apply by visiting the College of Science website at <http://www.northeastern.edu/cos> and clicking on the "Faculty Positions" button.

Please submit a letter of interest, curriculum vitae, the names and contact information for five references, and a brief description of research. Reference letters are not required at this stage and will be solicited by the Search Committee if needed.

Informal inquiries can be addressed to Dr. Egon Schulte, Chair, Mathematics Chair Search Committee, schulte@neu.edu.

The earliest anticipated start date is July 1, 2013. Review of applications will

begin in February 1, 2013, and continue until the position is filled.

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CHILE

PONTIFICIA UNIVERSIDAD CATOLICA DE CHILE Departamento de Matemáticas

The Department of Mathematics invites applications for one tenure-track position at the Assistant Professor level beginning either March or August 2014. 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 approximately US\$48,000.

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

Monica Musso
Director
Departamento de Matemáticas
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, 2013.

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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 2013 rate is \$3.50 per word with a minimum two-line headline. 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: June/July 2013 issue–April 26, 2013; August 2013 issue–May 29, 2013; September 2013 issue–July 1, 2013, October 2013 issue–July 26, 2013; November 2013 issue–August 29, 2013; December 2013 issue–September 30, 2013.

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 1373 (vol. 44).

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 clasads@ams.org. AMS location for express delivery packages is 201 Charles Street, Providence, Rhode Island 02904. Advertisers will be billed upon publication.