

# 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 features, memorials, 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 **production editor** is the person to whom to send items for "Mathematics People", "Mathematics Opportunities", "For Your Information", "Reference and Book List", and "Mathematics Calendar".

**Permissions requests** should be sent to: [reprint-permission@ams.org](mailto:reprint-permission@ams.org).

Contact the **editor** at: [notices@math.wustl.edu](mailto:notices@math.wustl.edu) or by fax: at 314-935-6839.

Contact the **production editor** at: [notices@ams.org](mailto:notices@ams.org) or by fax: at 401-331-3842. Postal addresses for both may be found in the masthead.

## Upcoming Deadlines

**March 31, 2015:** Nominations for the Graham Wright Award for Distinguished Service of the Canadian Mathematical Society. See the website [cms.math.ca/Prizes/dis-nom](http://cms.math.ca/Prizes/dis-nom).

**March 31, 2015:** Applications for AMS-Simons Travel Grants

program. See the website [www.ams.org/programs/travel-grants/AMS-SimonsTG](http://www.ams.org/programs/travel-grants/AMS-SimonsTG) or contact Steven Ferrucci, email: [ams-simons@ams.org](mailto:ams-simons@ams.org), telephone: 800-321-4267, ext. 4113.

**March 31, 2015:** Applications for IPAM graduate summer school on Games and Contracts for Cyber-Physical Security. See the website [www.ipam.ucla.edu](http://www.ipam.ucla.edu).

**April 15, 2015:** Applications for Project NExT fellowships. See the Project NExT website, [archives.math.utk.edu/projnext/](http://archives.math.utk.edu/projnext/), or contact David Kung, Director, at [projectnext@maa.org](mailto:projectnext@maa.org).

**April 15, 2015:** Nominations for 2015 Ostrowski Prize. See [www.ostrowski.ch/index\\_e.php?ifile=preis](http://www.ostrowski.ch/index_e.php?ifile=preis).

**April 15, 2015:** Applications for fall 2015 semester of Math in Moscow. See [www.mccme.ru/mathin-moscow](http://www.mccme.ru/mathin-moscow), or contact: Math in Moscow, P.O. Box 524, Wynnewood, PA 19096; fax: +7095-291-65-01; email: [mim@mccme.ru](mailto:mim@mccme.ru). Information and application forms for the AMS scholarships are available on the AMS website at [www.ams.org/programs/travel-grants/mimoscow](http://www.ams.org/programs/travel-grants/mimoscow), or contact: 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**—November 2013, p. 1358

**AMS Email Addresses**—February 2015, p. 179

**AMS Governance 2014**—June/July 2014, p. 650

**Contact Information for Mathematical Institutes**—August 2014, p. 786

**Conference Board of the Mathematical Sciences**—September 2014, p. 916

**IMU Executive Committee**—December 2014, p. 1370

**Information for *Notices* Authors**—June/July 2014, p. 646

**National Science Board**—January 2015, p. 71

**NRC Board on Mathematical Sciences and Their Applications**—March 2014, p. 305

**NSF Mathematical and Physical Sciences Advisory Committee**—February 2014, p. 202

**Program Officers for Federal Funding Agencies**—October 2013, p. 1188 (DoD, DoE); December 2014, p. 1369 (NSF Mathematics Education)

**Program Officers for NSF Division of Mathematical Sciences**—November 2014, p. 1264

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

**April 24, 2015:** Full proposals for 2016 NSF-CBMS Regional Research Conferences. See “Mathematics Opportunities” in this issue.

**April 30, 2015:** Nominations for AWM Gweneth Humphreys Award. See “Mathematics Opportunities” in this issue.

**May 1, 2015:** Applications for May review for National Academies Research Associateship programs. See [sites.nationalacademies.org/PGA/RAP/PGA\\_050491](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](mailto:rap@nas.edu).

**May 1, 2015:** Applications for AWM Travel Grants and Mathematics Education Research Travel Grants. See <https://sites.google.com/site/awmmath/programs/travel-grants>; telephone: 703-934-0163; or email: [awm@awm-math.org](mailto:awm@awm-math.org); or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

**June 1, 2015:** Proposals for IHP Poincaré Chair. See “Mathematics Opportunities” in this issue.

**July 8, 2015:** Proposals for NSF Enriched Doctoral Training in the Mathematical Sciences program. See “Mathematics Opportunities” in this issue.

**August 1, 2015:** Applications for August review for National Academies Research Associateship programs. See [sites.nationalacademies.org/PGA/RAP/PGA\\_050491](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](mailto:rap@nas.edu).

**September 15, 2015:** Applications for 2016 semester of Math in Moscow. See “Mathematics Opportunities” in this issue.

**October 1, 2015:** Applications for AWM Travel Grants and Mathematics Education Research Travel Grants. See <https://sites.google.com/site/awmmath/programs/>

[travel-grants](mailto:travel-grants); telephone: 703-934-0163; or email: [awm@awm-math.org](mailto:awm@awm-math.org); or contact Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

**November 1, 2015:** Applications for November review for National Academies Research Associateship programs. See [sites.nationalacademies.org/PGA/RAP/PGA\\_050491](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](mailto:rap@nas.edu).

### 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](mailto:notices-booklist@ams.org).*

\*Added to “Book List” since the list’s last appearance.

*Alan M. Turing: Centenary Edition*, by Sara Turing. Cambridge University Press, April 2012. ISBN-13: 978-11070-205-80. (Reviewed September 2014.)

*Alan Turing: The Enigma, The Centenary Edition*, by Andrew Hodges. Princeton University Press, May 2012. ISBN-13: 978-06911-556-47. (Reviewed September 2014.)

*Alan Turing: His Work and Impact*, edited by S. Barry Cooper and J. van Leeuwen. Elsevier, May 2013. ISBN-13: 978-01238-698-07. (Reviewed September 2014.)

*Alan Turing’s Electronic Brain: The Struggle to Build the ACE, the World’s Fastest Computer*, by B. Jack Copeland et al. Oxford University Press, May 2012. ISBN-13: 978-0-19-960915-4. (Reviewed September 2014.)

*André-Louis Cholesky: Mathematician, Topographer and Army Officer*, by Claude Brezinski and Dominique Tournès. Birkhäuser, August 2014. ISBN: 978-33190-813-42.

*Arnold: Swimming Against the Tide*, edited by Boris A. Khesin and Serge L. Tabachnikov. AMS, September 2014. ISBN-13: 978-14704-169-97.

\**Automate This: How Algorithms Took Over Our Markets, Our Jobs, and the World*, by Christopher Steiner. Portfolio Trade August 2013. ISBN-13: 978-15918-465-29.

*Baroque Science*, by Ofer Gal and Raz Chen-Morris. University of Chicago Press, March 2013. ISBN-13: 978-02262-129-82.

*Beating the Odds: The Life and Times of E. A. Milne*, by Meg Weston. Imperial College Press, June 2013. ISBN-13: 978-18481-690-74.

*Beautiful Geometry*, by Eli Maor and Eugen Jost. Princeton University Press, January 2014. ISBN-13: 978-06911-509-94.

*Beyond Banneker: Black Mathematicians and the Paths to Excellence*, by Erica N. Walker. State University of New York Press, June 2014. ISBN-13: 978-14384-521-59.

*Combinatorics: Ancient and Modern*, by Robin Wilson and John J. Watkins. Oxford University Press, August 2013. ISBN-13: 978-01996-565-92.

\**The Computing Universe: A Journey through a Revolution*, by Tony Hey and Gyuri Pápay. Cambridge University Press, December 2014. ISBN-13: 978-05211-501-87.

*A Curious History of Mathematics: The Big Ideas from Early Number Concepts to Chaos Theory*, by Joel Levy. Andre Deutsch, February 2014. ISBN-13: 978-02330-038-56.

*Doing Data Science: Straight Talk from the Frontline*, by Rachel Schutt and Cathy O’Neil. O’Reilly Media, November 2013. ISBN: 978-1-449-35865-5. (Reviewed October 2014.)

\**Doing Mathematics: Convention, Subject, Calculation, Analogy*, by Martin H. Krieger. World Scientific, Second Edition, 2015. ISBN-13: 978-981-4571-83-8.

\**Einstein’s Dice and Schrödinger’s Cat: How Two Great Minds Battled Quantum Randomness to Create a Unified Theory of Physics*, by Paul Halpern. Basic Books, April 2015. ISBN-13: 978-04650-757-13.

\**Electricity and Magnetism for Mathematicians: A Guided Path from Maxwell’s Equations to Yang-Mills*, by Thomas A. Garrity. Cambridge University Press, January 2015. ISBN-13: 978-11074-351-62.

*Enlightening Symbols: A Short History of Mathematical Notation and*

*Its Hidden Powers*, by Joseph Mazur. Princeton University Press, March 2014. ISBN-13: 978-06911-546-33. (Reviewed February 2015.)

*Experiencing Mathematics: What Do We Do, When We Do Mathematics?*, by Reuben Hersh. AMS, February 2014. ISBN-13: 978-08218-942-00.

*\*The Fascinating World of Graph Theory*, by Arthur Benjamin, Gary Chartrand, and Ping Zhang. Princeton University Press January 2015. ISBN-13: 978-06911-638-19.

*Fifty Visions of Mathematics*, edited by Sam Parc. Oxford University Press, July 2014. ISBN-13: 978-01987-018-11.

*\*Finding Zero: A Mathematician's Odyssey to Uncover the Origins of Numbers*, by Amir D. Aczel. Palgrave Macmillan Trade, January 2015. ISBN-13: 978-11372-798-42.

*The Formula: How Algorithms Solve All Our Problems—And Create More*, by Luke Dormehl. Perigee Trade, November 2014. ISBN-13: 978-03991-705-39.

*Four Lives: A Celebration of Raymond Smullyan*, edited by Jason Rosenhouse. Dover Publications, February 2014. ISBN-13: 978-04864-906-70.

*Fractals: A Very Short Introduction*, by Kenneth Falconer. Oxford University Press, December 2013. ISBN-13: 978-01996-759-82.

*From Mathematics in Logic to Logic in Mathematics: Boole and Frege*, by Aliou Tall. Docent Press, July 2014. ISBN-13: 978-0-9887449-7-4.

*\*The Goddess of Small Victories*, by Yannick Grannec. Other Press, October 2014. ISBN-13: 978-15905-163-62.

*The Grapes of Math: How Life Reflects Numbers and Numbers Reflect Life*, by Alex Bellos. Simon and Schuster, June 2014. ISBN: 978-14516-400-90.

*\*Great Mathematics Books of the Twentieth Century: A Personal Journal*, by Lizhen Ji. International Press of Boston, April 2014. ISBN-13: 978-15714-628-31.

*A History in Sum: 150 Years of Mathematics at Harvard (1825–1975)*, by Steve Nadis and Shing-Tung Yau. Harvard University Press, October 2013. ISBN-13: 978-06747-250-03. (Reviewed June/July 2014.)

*The Improbability Principle: Why Coincidences, Miracles, and Rare Events Happen Every Day*, by David J. Hand. Scientific American/Farrar, Straus and Giroux, February 2014. ISBN-13: 978-03741-753-44. (Reviewed December 2014.)

*Infinitesimal: How a Dangerous Mathematical Theory Shaped the Modern World*, by Amir Alexander. Scientific American/Farrar, Straus and Giroux, April 2014. ISBN-13: 978-03741-768-15.

*James Clerk Maxwell: Perspective on his Life and Works*, edited by Raymond Flood Mark McCartney, and Andrew Whitaker. Oxford University Press, March 2014. ISBN-13: 978-01996-643-75.

*Jane Austen, Game Theorist*, by Michael Suk-Young Chwe. Princeton University Press, April 2013. ISBN-13: 978-06911-557-60.

*L. E. J. Brouwer—Topologist, Intuitionist, Philosopher: How Mathematics Is Rooted in Life*, by Dirk van Dalen. Springer (2013 edition), December 2012. ISBN-13: 978-14471-461-55. (Reviewed June/July 2014.)

*Levels of Infinity: Selected Writings on Mathematics and Philosophy*, by Hermann Weyl (edited and with an introduction by Peter Pesic). Dover Publications, January 2013. ISBN: 978-04864-890-32.

*The Logic of Infinity*, by Barnaby Sheppard. Cambridge University Press, May 2014. ISBN-13: 978-11076-786-68.

*Love and Math: The Heart of Hidden Reality*, by Edward Frenkel. Basic Books, October 2013. ISBN-13: 978-04650-507-41. (Reviewed October 2014.)

*Math Bytes: Google Bombs, Chocolate-Covered Pi, and Other Cool Bits in Computing*, by Tim Chartier. Princeton University Press, April 2014. ISBN-13: 978-06911-606-03.

*Mathematical Expeditions: Exploring Word Problems Across the Ages*, by Frank J. Swetz. Johns Hopkins University Press, June 2012. ISBN: 978-14214-043-87.

*Mathematical Understanding of Nature: Essays on Amazing Physical Phenomena and Their Understanding by Mathematicians*, by V. I. Arnold. AMS, September 2014. ISBN-13: 978-14704-170-17.

*The Mathematician's Shiva*, by Stuart Rojstaczer. Penguin Books,

September 2014. ISBN-13: 978-014312-631-7.

*Mathematics and the Making of Modern Ireland: Trinity College Dublin from Cromwell to the Celtic Tiger*, by David Attis. Docent Press, October 2014. ISBN-13: 978-0-9887449-8-1.

*Mathematics and the Real World: The Remarkable Role of Evolution in the Making of Mathematics*, by Zvi Artstein. Prometheus Books, September 2014. ISBN-13: 978-16161-409-15.

*The Mathematics Devotional: Celebrating the Wisdom and Beauty of Mathematics*, by Clifford Pickover. Sterling, November 2014. ISBN-13: 978-14549-132-21.

*Mathematics of the Transcendental*, by Alain Badiou (translated by A. J. Bartlett and Alex Ling). Bloomsbury Academic, March 2014. ISBN-13: 978-14411-892-40.

*\*Mathematics without Apologies: Portrait of a Problematic Vocation*, by Michael Harris. Princeton University Press, January 2015. ISBN-13: 978-06911-542-37.

*A Mind For Numbers: How to Excel at Math and Science (Even If You Flunked Algebra)*, by Barbara Oakley. Tarcher, July 2014. ISBN-13: 978-03991-652-45.

*\*My Life and Functions*, by Walter K. Hayman. Lulu.com, October 2014. ISBN-13: 978-13260-302-09.

*The New York Times Book of Mathematics: More Than 100 Years of Writing by the Numbers*, edited by Gina Kolata. Sterling, June 2013. ISBN-13: 978-14027-932-26. (Reviewed May 2014.)

*Numbers Are Forever*, by Liz Strachan. Constable, March 2014. ISBN-13: 978-14721-110-43.

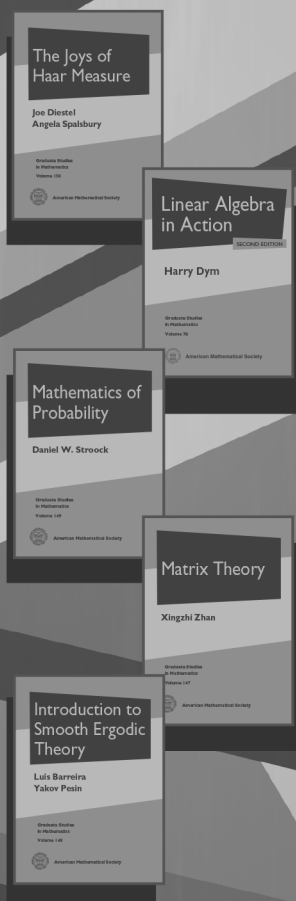
*On Leibniz: Expanded Edition*, by Nicholas Rescher. University of Pittsburgh Press, June 2013. ISBN-13: 978-08229-621-82.

*Origins of Mathematical Words: A Comprehensive Dictionary of Latin, Greek, and Arabic Roots*, by Anthony Lo Bello. Johns Hopkins University Press, November 2013. ISBN-13: 978-14214-109-82.

*Parables, Parabolas and Catastrophes: Conversations on Mathematics, Science and Philosophy*, by René Thom. Translated by Roy Lisker and edited by S. Peter Tsatsanis. Thombooks Press, November 2014

## Graduate Studies in Mathematics

The volumes in this series are specifically designed as graduate studies texts, but are also suitable for recommended and/or supplemental course reading. With appeal to both students and professors, these texts make ideal independent study resources. The breadth and depth of the series' coverage make it an ideal acquisition for all academic libraries that support mathematics programs.



For more information on this series visit  
[www.ams.org/bookstore/gsmseries](http://www.ams.org/bookstore/gsmseries)

## Reference and Book List

(distributed only by [amazon.ca](http://amazon.ca) or [amazon.com](http://amazon.com)). ISBN-13:978-09939-269-07.

*The Perfect Theory: A Century of Geniuses and the Battle over General Relativity*, by Pedro G. Ferreira. Houghton Mifflin Harcourt, February 2014. ISBN-13: 978-05475-548-91.

*Philosophy of Mathematics in the Twentieth Century*, by Charles Parsons. Harvard University Press, March 2014. ISBN-13: 978-06747-280-66.

*Pearls from a Lost City: The Lvov School of Mathematics*, by Roman Duda (translated by Daniel Davies). AMS, July 2014. ISBN-13: 978-14704-107-66.

*Probably Approximately Correct: Nature's Algorithms for Learning and Prospering in a Complex World*, by Leslie Valiant. Basic Books, June 2013. ISBN-13: 978-04650-327-16. (Reviewed November 2014.)

*Professor Stewart's Casebook of Mathematical Mysteries*, by Ian Stewart. Basic Books, October 2014. ISBN-13: 978-04650-549-78.

*Quantum Computing since Democritus*, by Scott Aaronson. Cambridge University Press, March 2013. ISBN-13: 978-05211-995-68. (Reviewed November 2014.)

*Ramanujan's Place in the World of Mathematics: Essays Providing a Comparative Study*, by Krishnaswami Alladi. Springer, 2013. ISBN: 978-81322-076-65.

*The Simpsons and Their Mathematical Secrets*, by Simon Singh. Bloomsbury, October 2013. ISBN-13: 978-14088-353-02. (Reviewed January 2015.)

*Struck by Genius: How a Brain Injury Made Me a Mathematical Marvel*, by Jason Padgett and Maureen Ann Seaberg. Houghton Mifflin Harcourt, April 2014. ISBN-13: 978-05440-456-06.

*Synthetic Philosophy of Contemporary Mathematics*, by Fernando Zalamea. Urbanomic/Sequence Press, January 2013. ISBN: 978-09567-750-16.

*\*Taming the Unknown: A History of Algebra from Antiquity to the Early Twentieth Century*, by Victor J. Katz and Karen Hunger Parshall. Princeton University Press, July 2014. ISBN-13: 978-06911-490-59.

*The Tower of Hanoi: Myths and Maths*, by Andreas M. Hinz, Sandi Klavzar, Uros Milutinovic, and Ciril Petr. Birkhäuser, January 2013. ISBN: 978-303-48023-69.

*Turing: Pioneer of the Information Age*, by Jack Copeland. Oxford University Press, January 2013. ISBN-13: 978-01996-397-93. (Reviewed September 2014.)

*Turing's Cathedral: The Origins of the Digital Universe*, by George Dyson. Pantheon/Vintage, December 2012. ISBN-13: 978-14000-759-97. (Reviewed August 2014.)

*The War of Guns and Mathematics: Mathematical Practices and Communities in France and Its Western Allies Around World War I*, by David Aubin and Catherine Goldstein. AMS, October 2014. ISBN-13: 978-14704-146-96.

*\*What's Math Got to Do with It?: How Teachers and Parents Can Transform Mathematics Learning and Inspire Success*, by Jo Boaler. Penguin Books, revised edition, March 2015. ISBN-13: 978-01431-282-98.

*Why Is There Philosophy of Mathematics At All?*, by Ian Hacking. Cambridge University Press, April 2014. ISBN-13: 978-11070-501-74. (Reviewed December 2014.)

*Zombies and Calculus*, by Colin Adams. Princeton University Press, September 2014. ISBN-13: 978-06911-619-07.