
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.tamu.edu` in the case of the editor and `notices@ams.org` in the case of the managing editor. The fax numbers are 979-845-6028 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

July 30, 2001: Applications for NSF VIGRE Program. See <http://www.nsf.gov/mps/dms/>.

August 1, 2001: Applications for Fulbright Scholar lecturing and research grants. Contact the Council for International Exchange of Scholars (CIES), 3007 Tilden Street, NW, Suite 5L, Washington, DC 20008-3009; telephone 202-686-7877; World Wide Web http://www.cies.org/cies/pr_competit_02.htm.

August 15, 2001: Applications for the third competition for NRC Research Associateships. See <http://www4.nationalacademies.org/osep/rap/>, or contact the National Research Council, Associateship Programs (TJ 2114), 2101 Constitution

Avenue, NW, Washington, DC 20418; telephone 202-334-2760; fax 202-334-2759; e-mail: `rap@nas.edu`.

August 21, 2001: Deadline for letters of intent to submit Focused Research Group (FRG) proposals to NSF. September 21 is deadline for full proposals. See "Mathematics Opportunities" in this issue.

August 31, 2001: Nominations accepted through this date for the National Academy of Sciences Award in Applied Mathematics and Numerical Analysis. See "Mathematics Opportunities" in this issue.

Where to Find It

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

AMS Bylaws—November 1999, p. 1252

AMS e-Mail Addresses—November 2000, p. 1288

AMS Ethical Guidelines—June 1995, p. 694

AMS Officers 2000 and 2001 (Council, Executive Committee, Publications Committees, Board of Trustees)—May 2001, p. 520

AMS Officers and Committee Members—October 2000, p. 1127

Conference Board of the Mathematical Sciences—September 2000, p. 913

Information for *Notices* Authors—January 2001, p. 39

Mathematics Research Institutes Contact Information—August 2001, p. 731

National Science Board—February 2001, p. 216

New Journals for 2000—June/July 2001, p. 612

NRC Board on Mathematical Sciences and Staff—April 2001, p. 427

NRC Mathematical Sciences Education Board and Staff—May 2001 p. 517

NSF Mathematical and Physical Sciences Advisory Committee—March 2001, p. 328

Program Officers for Federal Funding Agencies—October 2000, p. 1100 (DoD, DoE); November 2000, p. 1291 (NSF)

September 1, 2001: Applications for AWM Workshops for Women Graduate Students and Postdocs. See <http://www.awm-math.org/>, or contact Workshop Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461; telephone 301-405-7892; e-mail: awm@math.umd.edu.

September 4, 2001: Deadline for proposals for NSF-administered Computational and Algorithmic Representations of Geometric Objects (CARGO) program. See "Mathematics Opportunities" in this issue.

September 15, 2001: Nominations for Alfred P. Sloan Research Fellowships. Contact Sloan Research Fellowships, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, NY 10111, or see <http://www.sloan.org/>.

October 1, 2001: Nominations for the Louise Hay and Alice T. Schafer awards of the AWM. See "Mathematics Opportunities" in this issue.

October 1, 2001: Nominations for the Emanuel and Carol Parzen Prize. Submit nominations to J. H. Matis, Department of Statistics, Texas A&M University, College Station, TX 77873-3143.

October 1, 2001: Applications for NSF/AWM Travel Grants for Women. See <http://www.awm-math.org/travelgrants.html>; telephone 301-405-7892; e-mail: awm@math.umd.edu.

October 17, 2001: Applications for NSF Mathematical Sciences Postdoctoral Research Fellowships. See <http://www.fastlane.nsf.gov/>.

October 31, 2001: Applications for AMS Travel Grants for ICM 2002. See "Mathematics Opportunities" in this issue.

November 1, 2001: Applications for Fulbright Scholar international education and academic administrator seminars. Contact the Council for International Exchange of Scholars (CIES), 3007 Tilden Street, NW, Suite 5L, Washington, DC 20008-3009; telephone 202-686-7877; World Wide Web http://www.cies.org/cies/pr_competit_02.htm.

December 31, 2001: Submissions for undergraduate paper contest in *Cryptologia*. See <http://www.dean.usma.edu/math/pubs/cryptologia/default.htm>.

<http://www.dean.usma.edu/math/pubs/cryptologia/default.htm>.

January 31, 2002: Applications for IMU travel grants for ICM 2002. See <http://elib.zib.de/IMU/>.

Contact Information for Mathematics Institutes

American Institute of Mathematics (AIM)

360 Portage Avenue
Palo Alto, CA 94306
Telephone: 650-845-2071
Fax: 650-845-2074
e-mail: conrey@aimath.org
World Wide Web:
<http://www.aimath.org/>

Stefan Banach International Mathematical Center

Institute of Mathematics
8 Āniadeckich str.
00-950 Warszawa, Poland
Telephone: +48-22-628-01-92
Fax: +48-22-622-57-50
e-mail: banach@impan.gov.pl
World Wide Web:
<http://www.impan.gov.pl/BC/>

Center for Discrete Mathematics and Theoretical Computer Science (DIMACS)

CoRE Building, 4th Floor
Rutgers University
96 Frelinghuysen Road
Piscataway, NJ 08854-8018
Telephone: 732-445-5930
Fax: 732-445-5932
e-mail: centeradmin@dimacs.rutgers.edu
World Wide Web:
<http://dimacs.rutgers.edu/>

Centre International de Rencontres Mathématiques (CIRM)

Case 916, 163, avenue de Luminy
F-13288 Marseille Cedex 09, France
Telephone: +33-4-91-83-30-00
Fax: +33-4-91-83-30-05
World Wide Web:
<http://cirm.univ-mrs.fr/>

Centre for Mathematical Physics and Stochastics (MaPhySto)

Department of Mathematical Sciences
University of Aarhus
Ny Munkegade, DK-8000 Aarhus C, Denmark

Telephone: +45-8942-3515, 3521
Fax: +45-8613-1769
e-mail: maphysto@maphysto.dk
World Wide Web:
<http://www.maphysto.dk/>

Centre de Recerca Matemàtica (CRM)

Institut d'Estudis Catalans
Aparat 50
E-08193 Bellaterra, Spain
Telephone: +34-93-581-1081
Fax: +34-93-581-2202
e-mail: crm@crm.es
World Wide Web:
<http://www.crm.es/>

Centre de Recherches Mathématiques (CRM)

Université de Montréal
C.P. 6128, Succ. Centre-ville
Montréal, Quebec, Canada H3C 3J7
Telephone: +1-514-343-7501
Fax: +1-514-343-2254
e-mail: activites@CRM.UMontreal.CA
World Wide Web:
<http://www.crm.umontreal.ca/>

Centro de Investigacion en Matemáticas (CIMAT)

A. P. 402, Guanajuato, Gto.
C.P. 36000, Mexico
Telephone: +52-473-271-55, 508-00
Fax: +52-473-257-49
e-mail: cimat@cimat.mx
World Wide Web:
<http://www.cimat.mx/>

Chennai Mathematical Institute

92 G. N. Chetty Road
Chennai 600 017, India
Telephone: +91-44-8284232, 8284251
Fax: +91-44-8250573
e-mail: office@smi.ernet.in
World Wide Web:
<http://www.smi.ernet.in/>

The Fields Institute for Research in Mathematical Sciences

222 College Street, 2nd Floor
Toronto, Ontario, Canada M5T 3J1
Telephone: +1-416-348-9710
Fax: +1-416-348-9714
e-mail: geninfo@fields.utoronto.ca
World Wide Web:
<http://www.fields.utoronto.ca/>

Forschungsinstitut für Mathematik (FIM)

Eidgenössische Technische Hochschule Zentrum
Rämistrasse 101
8092 Zurich, Switzerland
Telephone: +41-1-632-3396
Fax: +41-1-632-1614
e-mail: Marc.Burger@math.ethz.ch
World Wide Web:
<http://www.fim.math.ethz.ch/>

Institut des Hautes Études Scientifiques (IHES)

Le Bois-Marie
35, route de Chartres
F-91440 Bures-sur-Yvette, France
Telephone: +33-1-60-92-66-00
Fax: +33-1-60-92-66-69
World Wide Web:
<http://www.ihes.fr/>

Institut Mittag-Leffler

Auravägen 17
S-182 60 Djursholm, Sweden
Telephone: +46-8-622 05 60
e-mail: widman@m1.kva.se
World Wide Web:
<http://www.m1.kva.se/>

Institute for Advanced Study (IAS)

School of Mathematics
1 Einstein Drive
Princeton, NJ 08540
Telephone: 609-734-8100
Fax: 609-951-4459
e-mail: math@math.ias.edu
World Wide Web:
<http://www.math.ias.edu/>

Institute for Mathematics and its Applications (IMA)

University of Minnesota
400 Lind Hall
207 Church Street, SE
Minneapolis, MN 55455-0436
Telephone: 612-624-6066
Fax: 612-626-7370
e-mail: staff@ima.umn.edu
World Wide Web:
<http://www.ima.umn.edu/>

Institute for Pure and Applied Mathematics (IPAM)

Mathematics Department
University of California, Los Angeles
IPAM Building
460 Portola Plaza, Box 957121

Los Angeles, CA 90095-7121
Telephone: 310-825-4755
Fax: 310-825-4756
e-mail: ipam@math.ucla.edu
World Wide Web:
<http://www.ipam.org/>

Instituto de Matemática Pura e Aplicada (IMPA)

Estrada Dona Castorina, 110
22460-320 Rio de Janeiro, RJ,
Brazil
Telephone: +55-21-529-5000
Fax: +55-21-512-4115
e-mail: info@impa.br
World Wide Web:
<http://www.impa.br/>

International Center for Theoretical Physics (ICTP)

Strada Costiera 11, P.O. Box 586
34100 Trieste, Italy
Telephone: +39-040-2240111
Fax: +39-040-224163
e-mail: sci_info@ictp.trieste.it
World Wide Web:
<http://www.ictp.trieste.it/>

International Centre for Mathematical Sciences (ICMS)

14 India Street
Edinburgh EH3 6EZ, Scotland
Telephone: +44-131-220-1777
Fax: +44-131-220-1053
e-mail: icms@maths.ed.ac.uk
World Wide Web:
<http://www.ma.hw.ac.uk/icms/>

Isaac Newton Institute for Mathematical Sciences

20 Clarkson Road
Cambridge CB3 0EH, England
Telephone: +44-1223-335999
Fax: +44-1223-330508
e-mail: i.newton@newton.cam.ac.uk
World Wide Web: <http://www.newton.cam.ac.uk/>

Istituto Nazionale di Alta Matematica "F. Severi" (INDAM)

Citta Universitaria
P. le Aldo Moro 5
00185 Rome, Italy
Telephone: +39-6-490320
Fax: +39-6-4462293
e-mail: indam@mat.uniroma1.it
World Wide Web:
<http://indam1.mat.uniroma1.it/>

Korea Institute for Advanced Study (KIAS)

207-43 Cheongryangri-dong
Dongdaemun-gu
Seoul 130-012, Korea
Telephone: +82-2-958-3701
Fax: +82-2-958-3770
World Wide Web:
<http://www.kias.re.kr/>

Mathematical Research Centre (MCAA)

The University of Aarhus
Department of Mathematical Sciences
Ny Munkegade
8000 Aarhus C, Denmark
Telephone: +45-8942-3188
Fax: +45-8613-1769
e-mail: mcaa@imf.au.dk
World Wide Web:
<http://www.imf.au.dk/ResearchC/MCAA/index.html>

Mathematical Sciences Research Institute (MSRI)

1000 Centennial Drive, #5070
Berkeley, CA 94720-5070
Telephone: 510-642-0143
Fax: 510-642-8609
e-mail: inquiries@msri.org
World Wide Web:
<http://www.msri.org/>

Mathematisches Forschungsinstitut Oberwolfach

Lorenzenhof
D-77709 Oberwolfach-Walke,
Germany
Telephone: +49-7834-979-50
Fax: +49-7834-979-55
e-mail: admin@mfo.de
World Wide Web:
<http://www.mfo.de/>

Max-Planck-Institut für Mathematik

P.O. Box 7280
D-53072 Bonn, Germany
Telephone: +49-228-402-0
Fax: +49-228-402-277
e-mail: admin@mpim-bonn.mpg.de
World Wide Web:
<http://www.mpim-bonn.mpg.de/>

Max-Planck-Institut für Mathematik in den Naturwissenschaften

Inselstrasse 22-26
04103 Leipzig, Germany
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Fax: +49-341-9959-658
World Wide Web:
<http://www.mis.mpg.de/>

**Pacific Institute for the
Mathematical Sciences**

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Vancouver, BC, Canada V6T 1Z2
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Telephone: +1-604-822-3922
Fax: +1-604-822-0883
e-mail: pims@pims.math.ca
World Wide Web:
<http://www.pims.math.ca/>

**Research Institute for Mathemat-
ical Sciences (RIMS)**

Kyoto University
Kyoto, 606-8502, Japan
Fax: +81-75-753-7276
World Wide Web:
<http://www.kurims.kyoto-u.ac.jp/>

Steklov Institute of Mathematics

Russian Academy of Sciences
Leninsky, 32a
Moscow, Russia
Telephone: +7-095-938-1902
Fax: +7-095-938-1466
World Wide Web:
<http://www.ras.ru/local.docs/mian/mian.html>

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Fax: +7-812-310-53-77
e-mail: admin@pdmi.ras.ru
World Wide Web:
<http://www.pdmi.ras.ru/>

**Tata Institute of Fundamental
Research**

School of Mathematics
Dr. Homi Bhabha Road
Mumbai 400 005, India
Telephone: +91-22-2152971
Fax: +91-22-2152110, 2152181
World Wide Web:
<http://www.math.tifr.res.in/>

Book List

The Book List highlights books that have mathematical themes and hold appeal for a wide audience, including mathematicians, students, and a

significant portion of 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 the managing editor, e-mail: notices@ams.org.

Angles of Reflection: Logic and a Mother's Love, by Joan L. Richards. W. H. Freeman, May 2000. ISBN 0-716-73831-7.

Battle of Wits: The Complete Story of Codebreaking in World War II, by Stephen Budiansky. Free Press, October 2000. ISBN 0-684-85932-7.

The Bit and the Pendulum: How the New Physics of Information Is Revolutionizing Science, by Tom Siegfried. John Wiley & Sons, February 2000. ISBN 0-47132-174-5.

The Brain: Unraveling the Mystery of How It Works (The Neural Network Process), by Thomas L. Saaty. RWS Publications, 2000. ISBN 1-888603-02-X.

Chaotic Elections! A Mathematician Looks at Voting, by Donald G. Saari. AMS, April 2001. ISBN 0-8218-2847-9.

Computers Ltd.: What They Really Can't Do, by David Harel. Oxford University Press, November 2000. ISBN 0-198-50555-8.

* *Conned Again, Watson! Cautionary Tales of Logic, Math, and Probability*, by Colin Bruce. Perseus Publishing, January 2001. ISBN 0-7382-0345-9.

A Concise History of Mathematics, by Dirk J. Struik. Dover Publications, 1987. ISBN 0-486-60255-9. (Reviewed June/July 2001.)

Creators of Mathematics: The Irish Connection, by Ken Houston. University College Dublin Press, September 2000. ISBN 1-900-62149-5.

The Crest of the Peacock: The Non-European Roots of Mathematics, by George Gheverghese Joseph. Princeton University Press, October 2000 (new edition). ISBN 0-691-00659-8.

Crypto: How the Code Rebels Beat the Government—Saving Privacy in

the Digital Age, by Steven Levy. Viking Press, January 2001. ISBN 0-67085-950-8.

Divine Harmony: The Life and Teachings of Pythagoras, by John Strohmeier and Peter Westbrook. Berkeley Hills Books, November 1999. ISBN 0-965-37745-8.

The Dots and Boxes Game, by Elwyn Berlekamp. A K Peters, July 2000. ISBN 1-568-81129-2.

Duelling Idiots and Other Probability Puzzlers, by Paul J. Nahin. Princeton University Press, October 2000. ISBN 0-691-00979-1.

Education of a Mathematician, by Philip J. Davis. A K Peters, August 2000. ISBN 1-568-81116-0. (Reviewed January 2001.)

Einstein in Love: A Scientific Romance, by Dennis Overbye. Viking Press, October 2000. ISBN 0-670-89430-3.

Euclid's Window: The Story of Geometry from Parallel Lines to Hyperspace, by Leonard Mlodinow. Free Press, April 2001. ISBN 0-684-86523-8.

Exploring Randomness, by Gregory J. Chaitin. Springer, December 2000. ISBN 1-852-33417-7.

The Fermat Diary, by C. J. Mozzochi. AMS, October 2000. ISBN 0-8218-2670-0.

Finite vs. Infinite, Contributions to an Eternal Dilemma, Cristian S. Calude and Gheorghe Paun, editors. Springer, 2000. ISBN 1-852-33251-4.

* *Flatterland: Like Flatland, Only More So*, by Ian Stewart. Perseus Publishing, May 2001. ISBN 0-7382-0442-0.

The Fractal Murders, by Mark Cohen. E-book published by Southern Cross Review, 2001. World Wide Web: www.southerncrossreview.org/.

Geometry from Africa: Mathematical and Educational Explorations, by Paulus Gerdes. Mathematical Association of America, April 1999. ISBN 0-88385-715-4.

Gödel: A Life of Logic, by John L. Casti and Werner DePauli. Perseus, August 2000. ISBN 0-738-20274-6.

Gödel Meets Einstein: Time Travel in the Gödel Universe, by Pallo Yourgrau. Open Court, November 1999. ISBN 0-812-69408-2.

Hex Strategy: Making the Right Connections, by Cameron Browne. A K Peters, May 2000. ISBN 1-568-81117-9.

How to Solve It: Modern Heuristics, by Zbigniew Michalewicz and David B. Fogel. Springer, 2000. ISBN 3-540-66061-5.

The Kingdom of Infinite Number: A Field Guide, by Bryan Bunch. W. H. Freeman, January 2000. ISBN 0-716-73388-9.

The Math Gene: How Mathematical Thinking Evolved and Why Numbers Are Like Gossip, by Keith Devlin. Basic Books, August 2000. ISBN 0-465-01618-9. (Reviewed February 2001.)

Mathematics As Sign: Writing, Imagining, Counting, by Brian Rotman. Stanford University Press, September 2000. ISBN 0-804-73684-7.

Mathematics: Frontiers and Perspectives, V. Arnold, M. Atiyah, P. Lax, and B. Mazur, editors. AMS, December 1999. ISBN 0-8218-2697-2.

Mathematics Unlimited: 2001 and Beyond, Björn Engquist and Wilfried Schmid, editors. Springer, September 2000. ISBN 3-540-66913-2.

My Numbers, My Friends: Popular Lectures on Number Theory, by Paulo Ribenboim. Springer, February 2000. ISBN 0-387-98911-0.

The Mystery of the Aleph: Mathematics, the Kabbalah, and the Search for Infinity, by Amir D. Aczel. Four Walls Eight Windows, November 2000. ISBN 1-568-58105-X.

Newton's Gift: How Sir Isaac Newton Unlocked the System of the World, by David Berlinski. Free Press, October 2000. ISBN 0-684-84392-7.

Niels Hendrik Abel and His Times: Called Too Soon by Flames Afar, by Arild Stubhaug, translated by R. Daly. Springer, May 2000. ISBN 3-540-66834-9.

Number: From Ahmes to Cantor, by Midhat Gazalé. Princeton University Press, March 2000. ISBN 0-691-00515-X. (Reviewed in this issue.)

The Parrot's Theorem, by Denis Guedj. Weidenfeld & Nicolson, June 2000. ISBN 0-297-64578-1. (To be published in the U.S. by St. Martin's Press, September 2001, ISBN 0-312-28055-6.) (Reviewed March 2001.)

* *Proofs from the Book*, by M. Aigner and G. M. Ziegler. Revised and expanded second edition, Springer, January 2001. ISBN 3-540-67865-4.

Ptolemy's Geography, translated by J. Lennart Berggren and Alexander

Jones. Princeton University Press, November 2000. ISBN 0-691-01042-0.

The Pursuit of Perfect Packing, by Tomaso Aste and Denis Weaire. Institute of Physics Publishing, July 2000. ISBN 0-750-30648-3.

Radical Equations: Math Literacy and Civil Rights, by Robert P. Moses and Charles E. Cobb Jr. Beacon Press, February 2001. ISBN 0-807-03126-7.

The Search for Mathematical Roots, 1870-1940: Logics, Set Theories, and the Foundations of Mathematics from Cantor through Russell to Gödel, by I. Grattan-Guinness. Princeton University Press, February 2001. ISBN 0-691-0587-1.

The Story of Mathematics, by Richard Mankiewicz. Princeton University Press, February 2001. ISBN 0-691-08808-X.

Surfing through Hyperspace: Understanding Higher Universes in Six Easy Lessons, by Clifford A. Pickover. Oxford University Press, September 1999. ISBN 0-195-13006-5.

The Symbolic Universe: Geometry and Physics 1890-1930, edited by Jeremy Gray. Oxford University Press, September 1999. ISBN 0-198-50088-2.

* *Triangle of Thoughts*, by Alain Connes, André Lichnerowicz, and Marcel Paul Schützenberger. AMS, July 2001. ISBN 0-8218-2614-X.

Two Millennia of Mathematics: From Archimedes to Gauss, by George M. Phillips. Springer, July 2000. ISBN 0-387-95022-2.

The Universal Computer: The Road from Leibniz to Turing, by Martin Davis. W.W. Norton & Company, October 2000. ISBN 0-393-04785-7. (Reviewed May 2001.)

The Universal History of Computing: From the Abacus to the Quantum Computer, by Georges Ifrah; translated from the French and with notes by E. F. Harding, assisted by Sophie Wood, Ian Monk, Elizabeth Clegg, and Guido Waldman. John Wiley & Sons, November 2000. ISBN 0-471-39671-0.

The Universal History of Numbers: From Prehistory to the Invention of the Computer, by Georges Ifrah; translated from the French by David Bellos, E. F. Harding, Sophie Wood, and Ian Monk. John Wiley & Sons, December 1999. ISBN 0-471-37568-3.

The Unknowable, by Gregory J. Chaitin. Springer, August 1999. ISBN 9-814-02172-5.

What Is Mathematics? An Elementary Approach to Ideas and Methods, by Richard Courant and Herbert Robbins; second edition, revised by Ian Stewart. Oxford University Press, August 1996. ISBN 0-195-10519-2.

Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being, by George Lakoff and Rafael Núñez. Basic Books, October 2000. ISBN 0-465-03770-4.

White Light, by Rudy Rucker. Four Walls Eight Windows, April 2001. ISBN 1-56858-198-X.

Women Becoming Mathematicians: Creating a Professional Identity in Post-World War II America, by Margaret A. M. Murray. MIT Press, September 2000. ISBN 0-262-13369-5. (Reviewed in this issue.)

Wonders of Numbers: Adventures in Math, Mind, and Meaning, by Clifford A. Pickover. Oxford University Press, September 2000. ISBN 0-195-13342-0.

*Added to "Book List" since the list's last appearance.