

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, book reviews and other communications, and "Forum" pieces. 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.sunysb.edu in the case of the editor and notices@ams.org in the case of the managing editor. The fax numbers are 631-751-5730 for the editor and 401-331-3842 for the managing editor. Postal addresses may be found in the masthead.

Upcoming Deadlines

July 17, 2000: Full proposal for NSF VIGRE grants. See <http://www.nsf.gov/pubs/2000/nsf0040/nsf0040.html>, or contact the Division of Mathematical Sciences, Room 1025, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; telephone: 703-306-1870.

July 19, 2000: Preproposals for NSF IGERT program. See <http://www.nsf.gov/cgi-bin/getpub?nsf0078/>, or contact NSF 00-78-IGERT Program, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; telephone: 703-306-1870.

July 27, 2000: Proposals for NSF CAREER program. See <http://www.nsf.gov/cgi-bin/getpub?nsf0089/>.

July 31, 2000: Nominations for the Monroe Martin Prize. Contact J. A. Yorke, Director, Institute for Physical Sciences and Technology, University of Maryland, College Park, MD 20742.

August 1, 2000: Applications for Fulbright Scholarship Program 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.iie.org/cies/compo.htm>.

August 15, 2000: Third competition for NRC Research Associateships. See <http://www.national-academies.org/rap/>, or contact the

Where To Find It

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

AMS e-mail Addresses—November 1999, p. 1269

AMS Ethical Guidelines—June 1995, p. 694

AMS Officers 1999 and 2000 (Council, Executive Committee, Publications Committees, Board of Trustees)—May 2000, p. 591

AMS Officers and Committee Members—November 1999, p. 1271

AMS Bylaws—November 1999, p. 1252

Board on Mathematical Sciences and Staff—April 2000, p. 494

Information for Notices Authors—June/July 2000, p. 686

Mathematical Sciences Education Board and Staff—April 2000, p. 494

Mathematics Research Institutes Contact Information—August 2000, p. 786

National Science Board—January 2000, p. 71

New Journals for 1999—June/July 2000, p. 688

NSF Mathematical and Physical Sciences Advisory Committee—March 2000, p. 381

Program Officers for Federal Funding Agencies (DoD, DoE; NSF)—October 1999, p. 1075; November 1999, p. 1247

National Research Council, Associateship Programs (TJ 2114/D3), 2101 Constitution Avenue, NW, Washington, DC 20418; telephone: 202-334-2760; fax: 202-334-2759; e-mail: rap@nas.edu.

August 28, 2000: Applications for NRC travel/host grants for research. See "Mathematics Opportunities" in this issue.

September 1, 2000: Applications for the AWM 2001 Workshop for Women Graduate Students and Postdocs. 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. The AWM Web site is at <http://www.awm-math.org/>.

September 15, 2000: Nominations for Sloan Research Fellowships. Contact Sloan Research Fellowships, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, New York 10111, or see: <http://www.sloan.org/>.

October 1, 2000: Nominations for the AWM Louise Hay Award and Alice T. Schafer Prize. Contact Hay Award 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.

October 1, 2000: Applications for NSF/AWM Travel Grants for Women. See <http://www.awm-math.org/travelgrants.html>, or contact 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.

October 16, 2000: Applications for NSF Mathematical Sciences Postdoctoral Research Fellowships. See <http://www.fastlane.nsf.gov/>, or contact Division of Mathematical Sciences, Room 1025, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; telephone 703-306-1870; e-mail: msprf@nsf.gov.

November 1, 2000: Applications for Fulbright Scholar Program 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.iie.org/cies/compo.htm>.

January 8, 2001: Applications for NRC travel/host grants. See "Mathematics Opportunities" in this issue.

January 16, 2001: Proposals for NSF institute competition. See <http://www.nsf.gov/cgi-bin/getpub?nsf0086/>, or contact Division of Mathematical Sciences, Room 1025, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; telephone: 703-306-1870.

January 26, 2001: Full proposals for NSF IGERT program. See <http://www.nsf.gov/cgi-bin/getpub?nsf0078/>, or contact NSF 00-78 - IGERT Program, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; telephone: 703-306-1870.

October 1, 2001: Nominations for the Emanuel and Carol Parzen Prize. See "Mathematics Opportunities" in this issue.

Contact Information for Mathematics Institutes

American Institute of Mathematics
360 Portage Avenue
Palo Alto, CA 94306
Telephone: 650-845-2072,
650-845-2065
Fax: 650-845-2074
e-mail: conrey@aimath.org
World Wide Web:
<http://www.aimath.org/>

Stefan Banach International Mathematical Center
ul Mokotowska 25, P. O. Box 137
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: center-admin@dimacs.rutgers.edu
World Wide Web:
<http://dimacs.rutgers.edu/>

Centre International de Rencontres Mathématiques (CIRM)
Case 916, 163, avenue de Luminy
13288 Marseille Cedex 09, France
Telephone: +33 4 91 83 30 00
Fax: +33 4 91 83 30 05
e-mail: labesse@cirm.univ-mrs.fr
World Wide Web:
<http://cirm.univ-mrs.fr/>

Centre de Recerca Matemàtica (CRM)
Institut d'Estudis Catalans
Apartat 50
E-08193 Bellaterra, Spain
Telephone: +34 93 581 1081
Fax: +34 93 581 2202
e-mail: crm@crm.es
World Wide Web: <http://crm.es/>

Centre de Recherches Mathématiques (CRM)
Université de Montréal
C.P. 6128, Succ. Centre-ville
Montréal, Québec, Canada H3C 3J7
Telephone: 514-343-7501
Fax: 514-343-2254
e-mail: activites@crm.umontreal.ca
World Wide Web:
<http://www.crm.umontreal.ca/>

Centre for Mathematical Physics and Stochastics (MaPhySto)
Department of Mathematical Sciences
University of Aarhus
Ny Munkegade
DK-8000 Aarhus C, Denmark
Telephone: (+45) 8942 3532
Fax: (+45) 8613 1769
e-mail: maphysto@maphysto.dk
World Wide Web:
<http://www.maphysto.dk/>

Centro de Investigacion en Matemáticas (CIMAT)
A. P. 402, Guanajuato, Gto.
C.P. 36000, Mexico
Telephone: +52-473-271-55
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
 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: 416-348-9710
 Fax: 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
 Ramistrasse 101
 8092 Zürich, Switzerland
 Telephone: +41-1-632-3475
 Fax: +41-1-632-1614
 e-mail: Marcela.Kraemer@math.ethz.ch
 World Wide Web:
<http://www.fim.math.ethz.ch/>

Institut des Hautes Études Scientifiques (IHÉS)

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/>

Institute for Advanced Study (IAS)

School of Mathematics
 Olden Lane
 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/>

Institut Mittag-Leffler

Auravägen 17
 S-182 62 Djursholm, Sweden
 Telephone: +46 622 05 61
 e-mail: widman@m1.kva.se
 World Wide Web:
<http://www.m1.kva.se/>

Institute for Pure and Applied Mathematics (IPAM)

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 University of California, Los Angeles
 6363 Math Sciences
 405 Hilgard Avenue, Box 951555
 Los Angeles, CA 90095-1555
 Telephone: 310-825-4701
 Fax: 310-206-6673
 e-mail: ipam@math.ucla.edu
 World Wide Web:
<http://www.ipam.org/>

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 (0)131 220 1777
 Fax: +44 (0)131 220 1053
 e-mail: icms@math.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 (0)1223-335999
 Fax: +44 (0)1223-330508
 e-mail: inewton@newton.cam.ac.uk

World Wide Web:
<http://www.newton.cam.ac.uk/>

Istituto de Matemática Pura e Aplicada (IMPA)

Estrada Dona Castorina, 110
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 Rio de Janeiro, RJ, Brazil
 Telephone: +55 21-529 5000
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 World Wide Web:
<http://wwwimpa.br/>

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

Citta Universitaria
 P. le Aldo Moro 5
 00185 Rome, Italy
 Telephone: +39 6490320
 Fax: +39 64462293
 e-mail: indam@mat.uniroma1.it
 World Wide Web:
<http://indam.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

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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 402277
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
Telephone: +49 341 9959 50
Fax: +49 341 9959 658
World Wide Web:
<http://www.mis.mpg.de/>

Pacific Institute for the Mathematical Sciences

1933 West Mall
University of British Columbia
Vancouver, BC, Canada V6T 1Z2
Telephone: 604-822-3922
Fax: 604-822-0883
e-mail: pims@pims.math.ca
World Wide Web:
<http://www.pims.math.ca/>

Research Institute for Mathematical 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
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Fax: (+7 095) 938-1466
World Wide Web:
<http://www.ras.ru/local.docs/mian/mian.html>

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St. Petersburg 191011, Russia
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World Wide Web:
<http://www.pdmi.ras.ru/>

Tata Institute of Fundamental Research

School of Mathematics
Dr. Homi Bhabha Road
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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.

The Advent of the Algorithm: The Idea That Rules the World, by David Berlinski. Harcourt, March 2000. ISBN 0-151-00338-6.

The Arithmetic of Life, by George Shaffner. Ballantine Books, August 1999. ISBN 0-345-42631-2.

The Bride of Science, by Benjamin Woolley. MacMillan, August 1999. ISBN 0-333-72436-4.

* *Chance Rules: An Informal Guide to Probability, Risk, and Statistics*, by Brian S. Everitt. Springer, August 1999. ISBN 0-387-98768-1.

The Code Book: The Evolution of Secrecy from Mary, Queen of Scots to Quantum Cryptography, by Simon Singh. Doubleday, October 1999. ISBN 0-385-49531-5. (Reviewed March 2000.)

Complexity and Information, by J. F. Traub and Arthur G. Werschulz. Cambridge University Press, December 1998. ISBN 0-521-48005-1 (hardcover), 0-521-48506-1 (paperback).

The Eightfold Way: The Beauty of Klein's Quartic Curve, edited by Silvio Levy. Cambridge University Press, March 1999. ISBN 0-521-66066-1.

The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory, by Brian Greene. W. W. Norton & Company, February 1999. ISBN 0-393-04688-5.

Euclid: The Creation of Mathematics, by Benno Artmann. Springer, June 1999. ISBN 0-387-98423-2.

* *Excursions into Mathematics: Millennium Edition*, by Anatole Beck, Michael N. Cleicher, and Donald W. Crowe. A K Peters, 2000. ISBN 1-568-81115-2.

Fermat's Last Theorem for Amateurs, by Paulo Ribenboim. Springer, February 1999. ISBN 0-387-98508-5. (Reviewed April 2000.)

Five More Golden Rules: Knots, Codes, Chaos and Other Great Theories of 20th Century Mathematics, by John L. Casti. John Wiley & Sons, February 2000. ISBN 0-471-32233-4.

Fragile Dominion: Complexity and the Commons, by Simon Levin. Perseus Books, June 1999. ISBN 0-738-20111-1. (Reviewed May 2000.)

* *The Game's Afoot! Game Theory in Myth and Paradox*, by Alexander Mehlmann. AMS, 2000. ISBN 0-8218-2121-0.

A History of Algorithms: From the Pebble to the Microchip, edited by Jean-Luc Chabert. Springer, September 1999. ISBN 3-540-63369-3.

A History of the Circle: Mathematical Reasoning and the Physical Universe, by Ernest Zebrowski Jr. Rutgers University Press, August 1999. ISBN 0-813-52677-9.

Imaginary Numbers: An Anthology of Marvelous Mathematical Stories, Diversions, Poems, and Musings, edited by William Frucht. John Wiley & Sons, October 1999. ISBN 0-471-33244-5. (Reviewed in this issue.)

The Importance of Being Fuzzy and Other Insights from the Border between Math and Computers, by Arturo Sangalli. Princeton University Press, December 1998. ISBN 0-691-00144-8.

Infosense: Turning Data and Information into Knowledge, by Keith Devlin. W. H. Freeman, June 1999. ISBN 0-716-73484-2.

John von Neumann: The Scientific Genius Who Pioneered the Modern Computer, Game Theory, Nuclear Deterrence, and Much More, by Norman Macrae. AMS, October 1999. ISBN 0-821-82064-8.

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

A Mathematical Mystery Tour: Discovering the Truth and Beauty of the Cosmos, by A. K. Dewdney. John Wiley & Sons, March 1999. ISBN 0-471-23847-3. (Reviewed February 2000.)

Mathematical Sorcery: Revealing the Secrets of Numbers, by Calvin C. Clawson. Plenum Press, May 1999. ISBN 0-306-46003-3.

Mathematics and Mathematicians: Mathematics in Sweden before 1950, by Lars Gårding. AMS/London Mathematical Society, 1998. ISBN 0-821-80612-2.

Mathematics Success and Failure among African American Youth: The Roles of Sociohistorical Context, Community Forces, School Influence, and Individual Agency, by Danny B. Martin. Lawrence Erlbaum Associates, December 1999. ISBN 0-805-83042-1.

The Nature of Mathematical Modeling, by Neil Gershenfeld. Cambridge University Press, February 1999. ISBN 0-521-57095-6.

Noeuds: Genèse d'une théorie mathématique (Knots: Genesis of a Mathematical Theory), by Alexei Sossinsky (in French). Seuil, 1999. ISBN 2-020-32089-4. (Reviewed June/July 2000.)

The Nothing That Is: A Natural History of Zero, by Robert Kaplan. Oxford University Press, October 1999. ISBN 0-195-12842-7.

Number: From Ahmes to Cantor, by Midhat Gazalé. Princeton University Press, March 2000. ISBN 0-691-00515-X.

Philosophy of Mathematics: An Introduction to a World of Proofs and Pictures, by James Robert Brown. Routledge, August 1999. ISBN 0-415-12274-0.

Pioneers of Representation Theory: Frobenius, Burnside, Schur, and Brauer, by Charles W. Curtis. AMS/

London Mathematical Society, October 1999. ISBN 0-821-89002-6.

Proofs and Contradictions: The Story of the Alternating Sign Matrix Conjecture, by David M. Bressoud. MAA Spectrum Series, published jointly with Cambridge University Press, August 1999. ISBN 0-521-66646-5.

* *Riemann, Topology, and Physics*, by Michael Monastyrsky. Translated by Roger Cooke, James King, and Victoria King. Birkhäuser, second edition, May 1999. ISBN 3-7643-3789-3.

Shadows of the Circle: Conic Sections, Optimal Figures and Non-Euclidean Geometry, by Vagn Lundsgaard Hansen. World Scientific Publishing Company, November 1998. ISBN 9-810-23418-X.

Slicing Pizzas, Racing Turtles, and Further Adventures in Applied Mathematics, by Robert B. Banks. Princeton University Press, September 1999. ISBN 0-691-05947-0.

Small Worlds: The Dynamics of Networks between Order and Randomness, by Duncan J. Watts. Princeton University Press, November 1999. ISBN 0-691-00541-9.

Squaring the Circle: The War between Hobbes and Wallis, by Douglas M. Jesseph. University of Chicago Press, December 1999. ISBN 0-226-39899-4 (cloth), 0-226-39900-1 (paper).

Statistics on the Table: The History of Statistical Concepts and Methods, by Stephen M. Stigler. Harvard University Press, November 1999. ISBN 0-674-83601-4.

Stephen Smale: The Mathematician Who Broke the Dimension Barrier, by Steve Batterson. AMS, February 2000. ISBN 0-821-82045-1.

Turing and the Computer (The Big Idea), by Paul Strathern. Anchor Books, April 1999. ISBN 0-385-49243-X.

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

Uncle Petros and Goldbach's Conjecture by Apolstolos Doxiadis. Bloomsbury USA, February 2000. ISBN 1-582-34067-6.

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

What Are the Odds? Chance in Everyday Life, by Michael Orkin. W. H.

Freeman, December 1999. ISBN 0-716-73560-1.

What Counts: How Every Brain Is Hardwired for Math, by Brian Butterworth. Free Press, August 1999. ISBN 0-684-85417-1.

What Is Random? Discovering Chance and Order in Mathematics and the World, by Edward J. Beltrami. Springer, August 1999. ISBN 0-387-98737-1.

The Wild Numbers, by Philibert Schogt. Four Walls Eight Windows, April 2000. ISBN 1-568-68166-1.

Zero: The Biography of a Dangerous Idea, by Charles Seife. Viking Press, February 2000. ISBN 0-670-88457-X.

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