

## PUBLICATIONS *of* CONTINUING INTEREST

### Bestselling Titles in Algebraic Geometry and Applications

Recommended Text

#### Mirror Symmetry and Algebraic Geometry

David A. Cox, *Amherst College, MA*, and Sheldon Katz, *Oklahoma State University, Stillwater*

*Mathematical Surveys and Monographs*, Volume 68; 1999; ISBN 0-8218-1059-6; 469 pages; Hardcover; All AMS members \$55, List \$69, Order Code SURV/68CT98

#### Random Matrices, Frobenius Eigenvalues, and Monodromy

Nicholas M. Katz and Peter Sarnak, *Princeton University, NJ*

*Colloquium Publications*, Volume 45; 1999; ISBN 0-8218-1017-0; 419 pages; Hardcover; Individual member \$41, List \$69, Institutional member \$55, Order Code COLL/45CT98

Recommended Text

#### Algebraic Curves and Riemann Surfaces

Rick Miranda, *Colorado State University, Ft. Collins*

*Altogether, the present book is a masterly written, irresistible invitation to complex algebraic geometry and its generalization to the rich theory of algebraic schemes ...*

—*Zentralblatt für Mathematik*

*Contains an abundance of examples and problems and develops the basic notions ... thoroughly and carefully ... both beginners and experts as well will find a number of fascinating topics that do not normally appear in introductory texts.*

—*Bulletin of the American Mathematical Society*

*One of my students said that this is one of a very few books in algebraic geometry that he can read and understand. The price of the book is very affordable.*

—*Pawel Gajer, Johns Hopkins University*

*Graduate Studies in Mathematics*, Volume 5; 1995; ISBN 0-8218-0268-2; 390 pages; Hardcover; All AMS members \$35, List \$44, Order Code GSM/5CT98

#### Mirror Symmetry I

Shing-Tung Yau, *Harvard University, Cambridge, MA*, Editor

From a review for the first edition ...

*This volume is a requisite for those working in the area of CY 3-folds, as well as those interested in mathematical implications of contemporary physics.*

—*Mathematical Reviews*

Titles in this series are co-published with International Press, Cambridge, MA.

*AMS/IP Studies in Advanced Mathematics*, Volume 9; 1998; ISBN 0-8218-0665-3; 444 pages; Hardcover; All AMS members \$39, List \$49, Order Code AMSIP/9CT98

#### Mirror Symmetry II

B. Greene, *Cornell University, Ithaca, NY*, and S.-T. Yau, *Harvard University, Cambridge, MA*, Editors

Titles in this series are co-published with International Press, Cambridge, MA.

*AMS/IP Studies in Advanced Mathematics*, Volume 1; 1996; ISBN 0-8218-0634-3; 844 pages; Hardcover; Individual member \$51, List \$85, Institutional member \$68, Order Code AMSIP/1CT98

#### Mirror Symmetry III

Duong H. Phong, *Columbia University, New York*, Luc Vinet, *University of Montreal, PQ, Canada*, and Shing-Tung Yau, *Harvard University, Cambridge, MA*, Editors

This book is co-published by the AMS, International Press, and Centre de Recherches Mathématiques.

*AMS/IP Studies in Advanced Mathematics*, Volume 10; 1999; ISBN 0-8218-1193-2; 312 pages; Hardcover; All AMS members \$34, List \$42, Order Code AMSIP/10CT98

Supplementary Reading

#### Elliptic Functions and Elliptic Integrals

Viktor Prasolov, *Independent University of Moscow, Russia*, and Yuri Solov'ev, *Moscow State University, Russia*

*A wonderful choice of topics, delivered in a concrete and lively style ... provide a lively introduction to many classical topics that lie at the foundations of contemporary algebra, number theory and algebraic geometry.*

—*Mathematical Reviews*

*Translations of Mathematical Monographs*, Volume 170; 1997; ISBN 0-8218-0587-8; 185 pages; Hardcover; Individual member \$47, List \$79, Institutional member \$63, Order Code MMONO/170CT98

Recommended Text

#### Gröbner Bases and Convex Polytopes

Bernd Sturmfels, *University of California, Berkeley*

*This book is a state-of-the-art account of the rich interplay between combinatorics and geometry of convex polytopes and computational commutative algebra via the tool of Gröbner bases.*

—*Optima*

*Not only of interest for mathematicians studying Gröbner bases, but also for researchers working on the mathematical aspects of integer programming and computational statistics.*

—*Newsletter on Computational and Applied Mathematics*

*Thanks to the author's ingenious writing, most of the material should be accessible to first-year graduate students in mathematics ... will be a landmark for further study of Gröbner bases in new branches of mathematics. It underlines the powerful techniques of commutative algebra in the interplay with combinatorics and polyhedral geometry.*

—*Mathematical Reviews*

*The exposition is clear and very well motivated ... The reader will be amply rewarded, as this is an elegantly written work of wide scholarship.*

—*Bulletin of the London Mathematical Society*

*University Lecture Series*, Volume 8; 1996; ISBN 0-8218-0487-1; 162 pages; Softcover; All AMS members \$23, List \$29, Order Code ULECT/8CT98

All prices subject to change. Charges for delivery are \$3.00 per order. For optional air delivery outside of the continental U. S., please include \$6.50 per item. Prepayment required. Order from: American Mathematical Society, P. O. Box 5904, Boston, MA 02206-5904, USA. For credit card orders, fax 1-401-455-4046 or call toll free 1-800-321-4AMS (4267) in the U. S. and Canada, 1-401-455-4000 worldwide. Or place your order through the AMS bookstore at [www.ams.org/bookstore/](http://www.ams.org/bookstore/). Residents of Canada, please include 7% GST.



# AMS

AMERICAN MATHEMATICAL SOCIETY

For more publications in your subject area visit the AMS Bookstore: [www.ams.org/bookstore/](http://www.ams.org/bookstore/).