

## Editorial Information

As of December 31, 1996, the backlog for this journal was approximately 0 issues. This estimate is the result of dividing the number of manuscripts for this journal in the Providence office that have not yet gone to the printer on the above date by the average number of articles per issue over the previous twelve months, reduced by the number of issues published in six months (the time necessary for editing and composing a typical issue).

A Consent to Publish and Copyright Agreement is required before a paper will be published in this journal. By submitting a paper to this journal, authors certify that the results have not been submitted to nor are they under consideration for publication by another journal, conference proceedings, or similar publication.

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The first page must consist of a *descriptive title*, followed by an *abstract* that summarizes the article in language suitable for workers in the general field (algebra, analysis, etc.). The *descriptive title* should be short, but informative; useless or vague phrases such as “some remarks about” or “concerning” should be avoided. The *abstract* must be brief and reasonably self-contained. Included with the footnotes to the paper, there should be the 1991 *Mathematics Subject Classification* representing the primary and secondary subjects of the article. This may be followed by a list of *key words and phrases* describing the subject matter of the article and taken from it. A list of classifications may be found in the annual index of *Mathematical Reviews*, published with the December issue starting in 1990. Journal abbreviations used in bibliographies are also listed in the latest *Mathematical Reviews* annual index. The classifications and the journal abbreviations are accessible from e-MATH via the World Wide Web through the URL <http://www.ams.org/committee/publications/mr-info.html> or via FTP to [e-math.ams.org](ftp://e-math.ams.org) (login as `anonymous` and enter username as password). The classifications are available as a browsable list and the journal abbreviations are available through a search tool. When the manuscript is submitted, authors should supply the editor with electronic addresses if available. These will be printed after the postal address at the end of each article.

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This tribute to Paul André Meyer and Jacques Neveu displays their wide influence on modern probability theory by gathering nineteen original research papers, drawn from a large range of topics: potential theory, classical stochastic processes and their laws, non-commutative probability, estimates of heat kernels, entropy, ergodic theory, phase transition, stochastic models in financial markets, and excursion theory.

Titles in this series are published by the Société Mathématique de France and distributed by the AMS in the United States, Canada, and Mexico. Orders from other countries should be sent to the SMF, Maison de la SMF, B.P. 67, 13274 Marseille cedex 09, France, or to Institut Henri Poincaré, 11 rue Pierre et Marie Curie, 75231 Paris cedex 05, France. Members of the SMF receive a 30% discount from list.

Astérisque, Number 236; 1996; 308 pages; Softcover; List \$68; Individual AMS members \$61; Order code AST/236MC

### Modular Interfaces: Modular Lie Algebras, Quantum Groups, and Lie Superalgebras

Vyjayanthi Chari and Ivan B. Penkov, *University of California, Riverside*, Editors

This book is a collection of papers dedicated to Richard E. Block, whose research has been largely devoted to the study of Lie algebras of prime characteristic (specifically the classification of simple Lie algebras). The volume presents proceedings of a conference held at the University of California at Riverside in February 1994 on the occasion of his retirement. The conference focused on the interplay between the theory of Lie algebras of prime characteristic, quantum groups, and Lie superalgebras.

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

AMS/IP Studies in Advanced Mathematics, Volume 4; 1997; 160 pages; Softcover; ISBN 0-8218-0748-X; List \$35; All AMS members \$28; Order code AMSIP/4MC

### Operads: Proceedings of Renaissance Conferences

Jean-Louis Loday, *CNRS, Université Louis Pasteur, Strasbourg, France*, James D. Stasheff, *University of North Carolina, Chapel Hill*, and Alexander A. Voronov, *Massachusetts Institute of Technology, Cambridge, MA*, Editors

"Operads" are mathematical devices which model many sorts of algebras (such as associative, commutative, Lie, Poisson, alternative, Leibniz, etc., including those defined up to homotopy, such as  $A_\infty$ -algebras). Since the notion of an operad appeared in the seventies in algebraic topology, there has been a renaissance in this theory due to the discovery of relationships with graph cohomology, Koszul duality, representation theory, combinatorics, cyclic cohomology, moduli spaces, knot theory, and quantum field theory.

This renaissance was recognized at a special session "Moduli Spaces, Operads, and Representation Theory" of the AMS meeting in Hartford, CT (March 1995), and at a conference "Opérades et Algèbre

Homotopique" held at the Centre International de Rencontres Mathématiques at Luminy, France (May-June 1995). Both meetings drew a diverse group of researchers.

The authors have arranged the contributions so as to emphasize certain themes around which the renaissance of operads took place: homotopy algebra, algebraic topology, polyhedra and combinatorics, and applications to physics.

Contemporary Mathematics, Volume 202; 1997; 443 pages; Softcover; ISBN 0-8218-0513-4; List \$85; Individual member \$51; Order code CONM/202MC

### Partial Order Methods in Verification

Doron A. Peled, *Lucent Technologies, Murray Hill, NJ*, Vaughan R. Pratt, *Stanford University, CA*, and Gerard J. Holzmann, *Lucent Technologies, Murray Hill, NJ*, Editors

This book presents surveys on the theory and practice of modeling, specifying, and validating concurrent systems. It contains surveys of techniques used in tools developed for automatic validation of systems. Other papers present recent developments in concurrency theory, logics of programs, model-checking, automata and formal languages theory.

The volume contains the proceedings from the workshop, Partial Order Methods in Verification, which was held in Princeton, NJ, in July 1996. The workshop focused on both the practical and the theoretical aspects of using partial order models, including automata and formal languages, category theory, concurrency theory, logic, process algebra, program semantics, specification and verification, topology, and trace theory. The book also includes a lively e-mail debate that took place about the importance of the partial order dichotomy in modeling concurrency.

DIMACS: Series in Discrete Mathematics and Theoretical Computer Science, Volume 29; 1997; 403 pages; Hardcover; ISBN 0-8218-0579-7; List \$85; Individual member \$51; Order code DIMACS/29MC

### Singularities and Complex Geometry

Qi-keng Lu, *Shantou University, Guangdong, People's Republic of China*, Stephen S.-T. Yau, and Anatoly Libgober, *University of Illinois at Chicago*, Editors

This book represents the proceedings of the joint U.S.-China Seminar on Singularity and Complex Geometry held at the Institute of Mathematics of the Chinese Academy, Beijing, in June 1994. This was the first gathering of Chinese and American mathematicians working in these fields (several Japanese mathematicians also took part). The volume covers a wide range of problems in areas such as CR-manifolds, value distribution theory of holomorphic curves, topology of the complements of algebraic plane curves with singularities and arrangements, topology of non-isolated singularities, gauge theory on resolutions of simple singularities, and residues of foliations. The articles give accounts of research in these fast developing areas. Much of the material appears here for the first time in print.

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

AMS/IP Studies in Advanced Mathematics, Volume 5; 1997; 342 pages; Hardcover; ISBN 0-8218-0662-9; List \$49; All AMS members \$39; Order code AMSIP/5MC



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Sorin Popa, *University of California, Los Angeles*

CBMS Regional Conference Series in Mathematics, Number 86, ISBN 0-8218-0321-2, 110 pages (softcover), 1995, List \$19, All individuals \$15; order code CBMS/86MC

## Gröbner Bases and Convex Polytopes

Bernd Sturmfels, *University of California, Berkeley*

University Lecture Series, Volume 8, ISBN 0-8218-0487-1, 162 pages (softcover), 1995, List \$29, All AMS members \$23; order code ULECT/8MC

## Groups and Symmetry: A Guide to Discovering Mathematics

David W. Farmer, *Bucknell University, Lewisburg, PA*

... written in a lively conversational style, ... entertaining, and sometimes provoking, and will doubtlessly prove useful to its intended audience ...

—*Mathematical Reviews*

... introduces the reader to the excitement of the original discovery ...

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Mathematical World, Volume 5, ISBN 0-8218-0450-2, 102 pages (softcover), 1995, List \$19, All AMS members \$15; order code MAWRD/5MC

## An Invitation to Arithmetic Geometry

Dino Lorenzini, *University of Georgia, Athens*

Graduate Studies in Mathematics, Volume 9, ISBN 0-8218-0267-4, 397 pages (hardcover), 1996, List \$59, All AMS members \$47; order code GSM/9MC

## Knots and Surfaces: A Guide to Discovering Mathematics

David W. Farmer, *Bucknell University, Lewisburg, PA*, and Theodore B. Stanford, *University of Nevada, Reno*

The book is perfectly suited to a course for non-science majors in need of fulfilling a math requirement. All the sections have worked well at sparking student interest and convincing them that math is much more interesting than mere number-crunching and graphing.

—*William Bloch, Wheaton College*

Mathematical World, Volume 6, ISBN 0-8218-0451-0, 101 pages (softcover), 1995, List \$19, All AMS members \$15; order code MAWRD/6MC

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Jens Carsten Jantzen, *Aarhus Universitet, Denmark*

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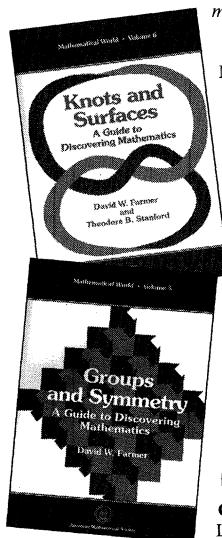
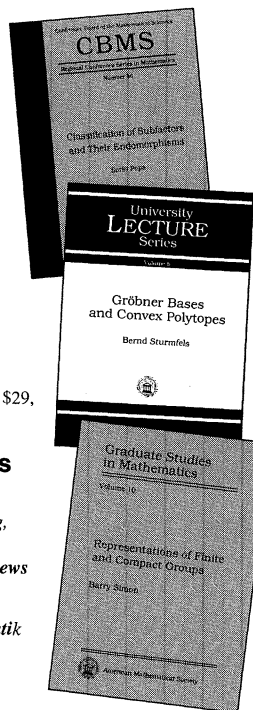
IAS/Park City Mathematics Series, Volume 2, ISBN 0-8218-0431-6, 339 pages (hardcover), 1995, List \$59\*, All AMS members \$47; order code PCMS/2MC

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## Representations of Finite and Compact Groups

Barry Simon, *California Institute of Technology, Pasadena*

Graduate Studies in Mathematics, Volume 10, ISBN 0-8218-0453-7, 266 pages (hardcover), 1995, List \$34, All AMS members \$27; order code GSM/10MC



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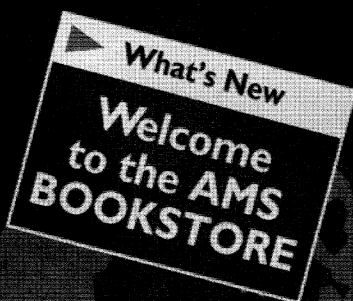
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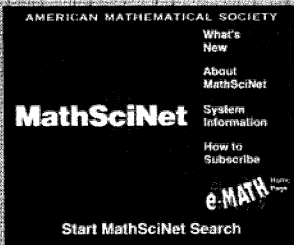
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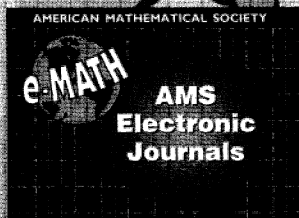
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0025-5718(199704)66:218;1-4