

Yurinsha Book News

Documents mathematiques,

Vol. 8: Demazure, M. /Grothendieck, A.:
Schemas en groupes(SGA 3), tome III:
Structure des schemas en groupes reductifs

This volume is a new, updated edition of the book "Schemas en groupes (SGA 3), tome III", Lecture Notes in Mathematics, 153, Springer, 1970. This tome gives the structure of reductive S-group schemes (ExpXIX to XXV), and their parabolic subgroups (ExpXXVI), over an arbitrary base scheme S.

Sep. 2011 337 pp. 461-068
9782856293249 12,880.

Vol. 7: Demazure, M. /Grothendieck, A.:
Schemas en groupes(SGA 3), tome I:
Proprietes generales des schemas en groupes

This volume is a new, updated edition of the book "Schemas en groupes (SGA 3), tome I", Lecture Notes in Mathematics, 151, Springer, 1970. This tome introduces the language of representable functors and sheaves and proves general results about group schemes (Exp. I to VII), and formal groups (Exp. VII).

Sep. 2011 638 pp. 461-067
9782856293232 15,130.

Vol. 4: Grothendieck, A.:

Seminaire de geometrie algebrique du Bois Marie -1962 (SGA 2):

Oct. 2005 208 pp. 97828562**** 再販準備中

The Societe Mathematique de France

<http://www.yurinsha.com>

ホームページは毎月25日更新予定です

No. 461

Nov. 2011

敬理科学 友隣社 洋書専門

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(株) 友 隣 社

*Mathematical Surveys and Monographs,***Vol. 79: Smith, S.:**

461-100

Subgroup Complexes

This book is intended as an overview of a research area that combines geometries for groups, topological aspects of simplicial complexes from p-subgroups of a group, and combinatorics of partially ordered sets.

The material is intended to serve as an advanced graduate-level text and partly as a general reference on the research area.

The treatment offers optional tracks for the reader interested in buildings, geometries for sporadic simple groups, and G-equivariant equivalences and homology for subgroup complexes.

Table of Contents: *Introduction Background material and examples

*Background: Posets, simplicial complexes, and topology *Examples: Subgroup complexes as geometries for simple groups Fundamental techniques

*Contractibility *Homotopy equivalence Basic applications *The reduced Euler characteristic $\{\tilde{w}\}$ and variations on vanishing *The reduced Lefschetz module $\{\tilde{L}\}$ and projectivity *Group cohomology and decompositions

Some more advanced topics *Spheres in homology and Quillen's Conjecture

*Connectivity, simple connectivity, and sphericity *Local-coefficient homology and representation theory *Orbit complexes and Alperin's Conjecture

Dec. 2011

364 pp.

9780821805015

11,000.

*Translations of Mathematical Monographs,***Vol. 241: Loginov, O. /Salnikov, A. /Yashchenko, V.:**

461-085

Boolean Functions in Coding Theory and Cryptography

This book offers a systematic presentation of cryptographic and code-theoretic aspects of the theory of Boolean functions.

Both classical and recent results are thoroughly presented.

Prerequisites for the book include basic knowledge of linear algebra, group theory, theory of finite fields, combinatorics, and probability.

The book can be used by research mathematicians and graduate students interested in discrete mathematics, coding theory, and cryptography.

Feb. 2012

335 pp.

9780821846803

15,090.

*AMS Chelsea Publishing,***Vol. 374: Bensoussan, A. /Lions, J.-L. /Papanicolaou, G.:****Asymptotic Analysis for Periodic Structures**

This is a reprinting of a book originally published in 1978.

At that time it was the first book on the subject of homogenization, which is the asymptotic analysis of partial differential equations with rapidly oscillating coefficients, and as such it sets the stage for what problems to consider and what methods to use, including probabilistic methods.

At the time the book was written the use of asymptotic expansions with multiple scales was new, especially their use as a theoretical tool, combined with energy methods and the construction of test functions for analysis with weak convergence methods.

This book gives systematic introduction of multiple scale methods for partial differential equations, including their original use for rigorous mathematical analysis in elliptic, parabolic, and hyperbolic problems, and with the use of probabilistic methods when appropriate.

Dec. 2011

392 pp.

9780821853245

7,140.

461-115

A. M. S.

*Contemporary Mathematics,**Vol. 560: Li, W. /Bartolini, L. /* 461-194

Luo, F. /Myers, R. /Rubinstein, H. (eds.):

**Topology and Geometry in Dimension Three:
Triangulations, Invariants, and Geometric Structures**

This volume contains the proceedings of a conference held 2010, at Oklahoma State University, in honor of William (Bus) Jaco's 70th birthday. His contributions to research in low dimensional geometry and topology and to the American mathematical community, especially through his work for the American Mathematical Society, were recognized during the conference. The focus of the conference was on triangulations and geometric structures for three-dimensional manifolds.

Jan. 2012

198 pp.

9780821852958

8,070.

Vol. 559: Bal, G. /Finch, D. /Kuchment, P. /Schotland, J. /

Stefanov, P. /Uhlmann, G. (eds.): 461-110

Tomography and Inverse Transport Theory

This volume contains research and review articles written by participants of two related international workshops "Mathematical Methods in Emerging Modalities of Medical Imaging" (October 2009) and "Inverse Transport Theory and Tomography" (May 2010), which were held at the Banff International Research Station in Banff, Canada.

These workshops brought together mathematicians, physicists, engineers, and medical researchers working at the cutting edge of medical imaging research and addressed the demanding mathematical problems arising in this area.

The articles, written by leading experts, address important analytic, numerical, and physical issues of the newly developing imaging modalities (e.g., photoacoustics, current impedance imaging, hybrid imaging techniques, elasticity imaging), as well as the recent progress in resolving outstanding problems of more traditional modalities, such as SPECT, ultrasound imaging, and inverse transport theory.

Jan. 2012

195 pp.

9780821853016

8,070.

Vol. 558: Grohe, M. /Makowsky, J. (eds.): 461-038**Model Theoretic Methods in Finite Combinatorics**

This volume contains the proceedings of the AMS-ASL Special Session on Model Theoretic Methods in Finite Combinatorics, 2009, in Washington, DC.

Over the last 20 years, various new connections between model theory and finite combinatorics emerged. The best known of these are in the area of 0-1 laws, but in recent years other very promising interactions between model theory and combinatorics have been developed in areas such as extremal combinatorics and graph limits, graph polynomials, homomorphism functions and related counting functions, and discrete algorithms, touching the boundaries of computer science and statistical physics.

This volume highlights some of the main results, techniques, and research directions of the area. Topics covered in this volume include recent developments on 0-1 laws and their variations, counting functions defined by homomorphisms and graph polynomials and their relation to logic, recurrences and spectra, the logical complexity of graphs, algorithmic meta theorems based on logic, universal and homogeneous structures, and logical aspects of Ramsey theory.

Dec. 2011

519 pp.

9780821849439

16,960.

A. M. S.

Roman, S.:

461-096

**Fundamentals of Group Theory:
An Advanced Approach**

Fundamentals of Group Theory provides an advanced look at the basic theory of groups.

Standard topics in the field are covered alongside a great deal of unique content.

There is an emphasis on universality when discussing the isomorphism theorems, quotient groups and free groups as well as a focus on the role of applying certain operations, such as intersection, lifting and quotient to a "group extension".

Certain concepts, such as subnormality, group actions and chain conditions are introduced perhaps a bit earlier than in other texts at this level, in the hopes that the reader would acclimate to these concepts earlier.

This book is suitable for a graduate course in group theory, part of a graduate course in abstract algebra or for independent study. It can also be read by advanced undergraduates.

The book assumes no specific background in group theory, but does assume some level of mathematical sophistication on the part of the reader.

Nov. 2011

369 pp.

9780817683009

10,070.

Cornerstones,

Napier, T. /Ramachandran, M.:

461-091

An Introduction to Riemann Surfaces

This textbook presents a unified approach to compact and noncompact Riemann surfaces from the point of view of the L^2 -method, a powerful technique used in the theory of several complex variables.

The work features a simple construction of a strictly subharmonic exhaustion function and a related construction of a positive-curvature Hermitian metric in a holomorphic line bundle, topics which serve as starting points for proofs of standard results such as the Mittag-Leffler, Weierstrass, and Runge theorems; the Riemann-Roch theorem; the Serre duality and Hodge decomposition theorems; and the uniformization theorem.

Sep. 2011

560 pp.

9780817646929

10,910.

Progress in Nonlinear Differential Equations & Their Applications,

Vol. 83: Csato, G. /Dacorogna, B. /Kneuss, O.:

461-125

The Pullback Equation for Differential Forms

The work begins by recounting various properties of exterior forms and differential forms that prove useful throughout the book.

From there it goes on to present the classical Hodge-Morrey decomposition and to give several versions of the Poincare lemma.

The core of the book discusses the case $k = n$, and then the case $1 \leq k \leq n-1$ with special attention on the case $k = 2$, which is fundamental in symplectic geometry. Special emphasis is given to optimal regularity, global results and boundary data.

The last part of the work discusses Holder spaces in detail; all the results presented here are essentially classical, but cannot be found in a single book. This section may serve as a reference on Holder spaces and therefore will be useful to mathematicians well beyond those who are only interested in the pullback equation.

Jan. 2012

424 pp.

9780817683122

15,110.

Birkhauser

Statistics: Textbooks and Monographs Series

Vol. 6: Woodward, W. /Gray, H. /Elliott, A.: 461-235
Applied Time Series Analysis

Virtually any random process developing chronologically can be viewed as a time series. In economics, closing prices of stocks, the cost of money, the jobless rate, and retail sales are just a few examples of many. Developed from course notes and extensively classroom-tested, *Applied Time Series Analysis* includes examples across a variety of fields, develops theory, and provides software to address time series problems in a broad spectrum of fields.

The authors organize the information in such a format that graduate students in Applied Science, Statistics, and Economics can satisfactorily navigate their way through the book while maintaining mathematical rigor.

Oct. 2011 544 pp. 11,890.
 9781439818374

Jureckova, J. /Sen, P. /Picek, J.: 461-218
Methodology in Robust and Nonparametric Statistics

Closely related to nonparametric methods, robust statistical methods are not unduly affected by data outliers or other small departures from model assumptions.

This book presents a comprehensive overview of methodology for robust and nonparametric statistics. It covers both methods in parallel in order to demonstrate their relative strengths and weaknesses.

Using examples to illustrate the methods, the text highlights applications in the fields of biomedical science, bioinformatics, finance, and engineering.

July 2012 400 pp. 12,480.
 9781439840689

Ansari, Q. /Lalitha, C. /Mehta, M.: 461-107
General Convexity, Nonsmooth Variational Inequalities, and Nonsmooth Optimization

This book presents the basic theory of directional derivatives and monotonicity that is required in the study of optimization problems and economic theory.

The authors discuss the concepts of generalized directional derivatives and generalized monotonicity.

They then explain how to use these concepts in the study of general variational inequality problems in terms of bifunctions in finite dimensions and as related to optimality conditions involving differentiable or directionally differentiable functions.

June 2012 300 pp. 12,480.
 9781439868201

Chapman & Hall/CRC Studies in Informatics Series

Weidenbach, C.: 461-285
Automation of Logic

Presenting first-order and propositional methods as well as implementation issues, this book provides a state-of-the-art introduction to the automation of logic. It focuses on superposition calculus and related rewriting techniques. It also covers decision procedures for certain theories and includes real-world applications.

Along with the relevant theory, each chapter contains implementation methods, historical background, suggestions for further reading, and software.

July 2012 400 pp. 11,310.
 9781439875353

C R C Press

*London Mathematical Society Lecture Note Series,***Vol. 398: Hales, T.:**

461-077

**Dense Sphere Packings:
A Blueprint for Formal Proofs**

The 400-year-old Kepler conjecture asserts that no packing of congruent balls in three dimensions can have a density exceeding the familiar pyramid-shaped cannonball arrangement.

In this book, a new proof of the conjecture is presented that makes it accessible for the first time to a broad mathematical audience.

The book also presents solutions to other previously unresolved conjectures in discrete geometry, including the strong dodecahedral conjecture on the smallest surface area of a Voronoi cell in a sphere packing, and Fejes Toth's conjecture describing all packings of congruent balls in which every ball touches twelve others.

This book is also currently being used as a blueprint for a large-scale formal proof project, which aims to check every logical inference of the proof of the Kepler conjecture by computer.

June 2012

300 pp.

9780521617703

6,250.

Vol. 397: Bolte, D. /Steiner, F. (eds.):

461-177

**Hyperbolic Geometry and Applications in
Quantum Chaos and Cosmology**

Hyperbolic geometry is a classical subject in pure mathematics which has exciting applications in theoretical physics.

In this book leading experts introduce hyperbolic geometry and Maass waveforms and discuss applications in quantum chaos and cosmology.

The book begins with an introductory chapter detailing the geometry of hyperbolic surfaces and includes numerous worked examples and exercises to give the reader a solid foundation for the rest of the book.

In later chapters the classical version of Selberg's trace formula is derived in detail and transfer operators are developed as tools in the spectral theory of Laplace-Beltrami operators on modular surfaces.

The computation of Maass waveforms and associated eigenvalues of the hyperbolic Laplacian on hyperbolic manifolds are also presented in a comprehensive way.

Feb. 2012

285 pp.

9781107610491

7,420.

Vol. 396: Ralph, C. /Simanca, S.:

461-165

**Arithmetic Differential Operators
over the p- adic Integers**

The study of arithmetic differential operators is a novel and promising area of mathematics. This complete introduction to the subject starts with the basics: a discussion of p-adic numbers and some of the classical differential analysis on the field of p-adic numbers leading to the definition of arithmetic differential operators on this field.

Buium's theory of arithmetic jet spaces is then developed succinctly in order to define arithmetic operators in general.

Features of the book include a comparison of the behaviour of these operators over the p-adic integers and their behaviour over the unramified completion, and a discussion of the relationship between characteristic functions of p-adic discs and arithmetic differential operators that disappears as soon as a single root of unity is adjoined to the p-adic integers.

Apr. 2012

220 pp.

9781107674141

6,890.

Cambridge

Encyclopedia of Mathematics and its Applications,

Vol. 145: Arov, D./Dym, H.

461-109

Bitangential Direct and Inverse Problems for Systems of Integral and Differential Equations

This largely self-contained treatment surveys, unites and extends some 20 years of research on direct and inverse problems for canonical systems of integral and differential equations and related systems.

Five basic inverse problems are studied in which the main part of the given data is either a monodromy matrix; an input scattering matrix; an input impedance matrix; a matrix valued spectral function; or an asymptotic scattering matrix.

The corresponding direct problems are also treated.

The book incorporates introductions to the theory of matrix valued entire functions, reproducing kernel Hilbert spaces of vector valued entire functions (with special attention to two important spaces introduced by L. de Branges), the theory of J-inner matrix valued functions and their application to bitangential interpolation and extension problems, which can be used independently for courses and seminars in analysis or for self-study.

June 2012

520 pp.

9781107018877

12,720.

Chmutov, S. /Duzhin, S. /Mostovoy, J.:

461-061

Introduction to Vassiliev Knot Invariants

With hundreds of worked examples, exercises and illustrations, this detailed exposition of the theory of Vassiliev knot invariants opens the field to students with little or no knowledge in this area.

It also serves as a guide to more advanced material.

The book begins with a basic and informal introduction to knot theory, giving many examples of knot invariants before the class of Vassiliev invariants is introduced.

This is followed by a detailed study of the algebras of Jacobi diagrams and 3-graphs, and the construction of functions on these algebras via Lie algebras.

May 2012

510 pp.

9781107020832

7,420.

The Cambridge China Library

Hua, L.-K.:

461-020

Introduction to Higher Mathematics 2 Vols. Set

The self-taught mathematician Hua Loo-Keng (1910-1985) spent most of his working life in China and suffered at first hand the turbulence of twentieth-century Chinese politics.

His influence has been credited with inspiring generations of mathematicians, while his papers on number theory are regarded as 'virtually an index to the major activities in that subject during the first half of the twentieth century.'

This book is based on the lectures given by Hua at the University of Science and Technology of China from 1958.

The course reflects Hua's instinctive technique, using the simplest tools to tackle even the most difficult problems, and contains both pure and applied mathematics, emphasising the interdependent relationships between different branches of the discipline.

May 2012

900 pp.

9781107020016

21,200.

Cambridge

*CBMS-NSF Regional Conference Series in
Applied Mathematics,*

Vol. 83: Jentzen, A. /Kloeden, P: 461-144

**Taylor Approximations for
Stochastic Partial Differential Equations**

This book presents a systematic theory of Taylor expansions of evolutionary-type stochastic partial differential equations (SPDEs).

The authors show how Taylor expansions can be used to derive higher order numerical methods for SPDEs, with a focus on pathwise and strong convergence.

In the case of multiplicative noise, the driving noise process is assumed to be a cylindrical Wiener process, while in the case of additive noise the SPDE is assumed to be driven by an arbitrary stochastic process with Holder continuous sample paths.

Recent developments on numerical methods for random and stochastic ordinary differential equations are also included since these are relevant for solving spatially discretised SPDEs as well as of interest in their own right.

Oct. 2011

220 pp.

9781611972009

8,160.

Vol. 81: Constantin, A.: 461-123

**Nonlinear Water Waves with Applications to
Wave-Current Interactions and Tsunamis**

This overview of some of the main results and recent developments in nonlinear water waves presents fundamental aspects of the field and discusses several important topics of current research interest.

It contains selected information about water-wave motion for which advanced mathematical study can be pursued, enabling readers to derive conclusions that explain observed phenomena to the greatest extent possible.

The author discusses the underlying physical factors of such waves and explores the physical relevance of the mathematical results that are presented.

Oct. 2011

331 pp.

9781611971866

9,430.

Classics in Applied Mathematics,

Vol. 69: Grisvard, P.: 461-137

Elliptic Problems in Nonsmooth Domains

This classic text focuses on elliptic boundary value problems in domains with nonsmooth boundaries and on problems with mixed boundary conditions.

Its contents are essential for an understanding of the behavior of numerical methods for partial differential equations (PDEs) on two-dimensional domains with corners.

Elliptic Problems in Nonsmooth Domains

* provides a careful and self-contained development of Sobolev spaces on nonsmooth domains, * develops a comprehensive theory for second-order elliptic boundary value problems, and * addresses fourth-order boundary value problems and numerical treatment of singularities.

Contents: Foreword; Preface; Chapter 1: Sobolev Spaces; Chapter 2: Regular Second-Order Elliptic Boundary Value Problems; Chapter 3: Second-Order Elliptic Boundary Value Problems in Convex Domains; Chapter 4: Second-Order Boundary Value Problems in Polygons; Chapter 5: More Singular Solutions; Chapter 6: Results in Spaces of Holder Functions; Chapter 7: A Model Fourth-Order Problem; Chapter 8: Miscellaneous;

Sep. 2011

410 pp.

9781611972023

10,490.

S. I. A. M.

Shimura, G.:

461-099

**Modular Forms:
Basics and Beyond**

This is an advanced book on modular forms.

While there are many books published about modular forms, they are written at an elementary level, and not so interesting from the viewpoint of a reader who already knows the basics.

This book offers something new, which may satisfy the desire of such a reader. However, we state every definition and every essential fact concerning classical modular forms of one variable.

One of the principal new features of this book is the theory of modular forms of half-integral weight, another being the discussion of theta functions and Eisenstein series of holomorphic and nonholomorphic types.

Dec. 2011

176 pp.

9781461421245

12,070.

Hilgert, J. /Neeb, K.-H:

461-080

Structure and Geometry of Lie Groups

The work begins with a study of matrix groups, which serve as examples to concretely and directly illustrate the correspondence between groups and their Lie algebras.

In the second part of the book, the authors investigate the basic structure and representation theory of finite dimensional Lie algebras, such as the rough structure theory relevant to the theorems of Levi and Malcev, the fine structure of semisimple Lie algebras (root decompositions), and questions related to representation theory.

In the third part of the book, the authors turn to global issues, most notably the interplay between differential geometry and Lie theory.

Finally, the fourth part of the book deals with the structure theory of Lie groups, including some refined applications of the exponential function, various classes of Lie groups, and structural issues for general Lie groups.

Dec. 2011

736 pp.

9780387847931

16,090.

Meyers, R. (ed.):

461-153

**Mathematics of Complexity and
Dynamical Systems**

3 Vols. Set

Mathematics of Complexity and Dynamical Systems is an authoritative reference to the basic tools and concepts of complexity, systems theory, and dynamical systems from the perspective of pure and applied mathematics. Complex systems are systems that comprise many interacting parts with the ability to generate a new quality of collective behavior through self-organization, e.g. the spontaneous formation of temporal, spatial or functional structures.

These systems are often characterized by extreme sensitivity to initial conditions as well as emergent behavior that are not readily predictable or even completely deterministic.

The more than 100 entries in this wide-ranging, single source work provide a comprehensive explication of the theory and applications of mathematical complexity, covering ergodic theory, fractals and multifractals, dynamical systems, perturbation theory, solitons, systems and control theory, and related topics.

Nov. 2011

1858 pp.

9781461418054

72,290.

Springer

Universitext

Brouwer, A. /Haemers, W.:

461-057

Spectra of Graphs

This book gives an elementary treatment of the basic material about graph spectra, both for ordinary, and Laplace and Seidel spectra. The text progresses systematically, by covering standard topics before presenting some new material on trees, strongly regular graphs, two-graphs, association schemes, p-ranks of configurations and similar topics. Exercises at the end of each chapter provide practice and vary from easy yet interesting applications of the treated theory, to little excursions into related topics.

Tables, references at the end of the book, an author and subject index enrich the text. Spectra of Graphs is written for researchers, teachers and graduate students interested in graph spectra.

The reader is assumed to be familiar with basic linear algebra and eigenvalues, although some more advanced topics in linear algebra, like the Perron-Frobenius theorem and eigenvalue interlacing are included.

July 2012

247 pp.

9781461419389

12,070.

Springer Theses

Sakmann, K.:

461-312

Many-Body Schrodinger Dynamics of Bose-Einstein Condensates

At extremely low temperatures, clouds of bosonic atoms form what is known as a Bose-Einstein condensate.

Recently, it has become clear that many different types of condensates --so called fragmented condensates--exist.

In order to tell whether fragmentation occurs or not, it is necessary to solve the full many-body Schrodinger equation, a task that remained elusive for experimentally relevant conditions for many years.

In this thesis the first numerically exact solutions of the time-dependent many-body Schrodinger equation for a bosonic Josephson junction are provided and compared to the approximate Gross-Pitaevskii and Bose-Hubbard theories.

Sep. 2011

137 pp.

9783642228650

16,790.

Shikhman, V.:

461-168

Topological Aspects of Nonsmooth Optimization

This book deals with nonsmooth structures arising within the optimization setting. It considers four optimization problems, namely, mathematical programs with complementarity constraints, general semi-infinite programming problems, mathematical programs with vanishing constraints and bilevel optimization.

The author uses the topological approach and topological invariants of corresponding feasible sets are investigated.

Moreover, the critical point theory in the sense of Morse is presented and parametric and stability issues are considered.

The material progresses systematically and establishes a comprehensive theory for a rather broad class of optimization problems tailored to their particular type of nonsmoothness.

Dec. 2011

191 pp.

9781461418962

12,070.

Springer

SpringerBriefs in Mathematics

Lifshits, M.: 461-225

Lectures on Gaussian Processes

Gaussian processes can be viewed as a far-reaching infinite-dimensional extension of classical normal random variables. Their theory presents a powerful range of tools for probabilistic modelling in various academic and technical domains such as Statistics, Forecasting, Finance, Information Transmission, Machine Learning - to mention just a few. The objective of these Briefs is to present a quick and condensed treatment of the core theory that a reader must understand in order to make his own independent contributions.

Nov. 2011 115 pp.
9783642249389 8,390.

Dragomir, S.: 461-132

Operator Inequalities of Ostrowski and Trapezoidal Type

The first chapter recalls some fundamental facts concerning bounded Selfadjoint operators on complex Hilbert spaces. The generalized Schwarz's inequality for positive Selfadjoint operators as well as some results for the spectrum of this class of operators are presented. The author also introduces and explores the fundamental results for polynomials in a linear operator, continuous functions of selfadjoint operators that will play a central role throughout the book.

Jan. 2012 120 pp.
9781461417781 8,390.

SpringerBriefs in Physics

Hemmick, D. /Shakur, A.: 461-298

Bell's Theorem and Quantum Realism: Reassessment in Light of the Schrodinger Paradox

Quantum theory presents a strange picture of the world, offering no real account of physical properties apart from observation. Neils Bohr felt that this reflected a core truth of nature: "There is no quantum world. There is only an abstract mathematical description." Among the most significant developments since Bohr's day has been the theorem of John S. Bell. It is important to consider whether Bell's analysis supports such a denial of microrealism. In this book, we evaluate the situation in terms of an early work of Erwin Schrodinger. Doing so, we see how Bell's theorem is conceptually related to the Conway and Kochen Free Will theorem and also to all the major anti-realism efforts.

Oct. 2011 111 pp.
9783642234675 8,390.

Rivas, A. /Huelga, S.: 461-310

Open Quantum Systems: An Introduction

In this volume the fundamental theory of open quantum systems is revised in the light of modern developments in the field. A unified approach to the quantum evolution of open systems is presented by merging concepts and methods traditionally employed by different communities, such as quantum optics, condensed matter, chemical physics and mathematical physics.

Oct. 2011 97 pp.
9783642233531 8,390.

Springer

Arai, T. /Feng, Q. /Kim, B.:

461-035

Proceedings of the 11th Asian Logic Conference

The Asian Logic Conference is part of the series of logic conferences inaugurated in Singapore in 1981.

It is normally held every three years and rotates among countries in the Asia-Pacific region. The 11th Asian Logic Conference is held in the National University of Singapore, in honour of Professor Chong Chit at on the occasion of his 60th birthday.

The conference is on the broad area of logic, including theoretical computer science. It is considered a major event in this field and is regularly sponsored by the Association of Symbolic Logic.

Aug. 2011

192 pp.

9789814360531

11,580.

Hemakul, W. /Wahyuni, S. /Sy, (eds.):

461-079

Proceedings of the International Conference on Algebra 2010:

This volume is an outcome of the International Conference on Algebra in celebration of the 70th birthday of Professor Shum Kar-Ping which was held in Gadjah Mada University on 7-10 October, 2011.

As a consequence of the wide coverage of his research interest and work, it presents 54 research papers, all original and referred, describing the latest research and development, and addressing a variety of issues and methods in semigroups, groups, rings and modules, lattices and Hopf Algebra.

Nov. 2011

750 pp.

25,740.

Series on Analysis, Applications and Computation

Pilipovic, S. /Stankovic, B. /Vindas, J.:

461-161

Asymptotic Behavior of Generalized Functions

The asymptotic analysis has obtained new impulses with the general development of various branches of mathematical analysis and their applications.

In this book, such impulses originate from the use of slowly varying functions and the asymptotic behavior of generalized functions.

The most developed approaches related to generalized functions are those of Vladimirov, Drozhinov and Zavyalov, and that of Kanwal and Estrada.

The first approach is followed by the authors of this book and extended in the direction of the S-asymptotics.

The second approach - of Estrada, Kanwal and Vindas - is related to moment asymptotic expansions of generalized functions and the Ces'aro behavior.

Oct. 2011

300 pp.

9789814366847

11,580.

Venkatachaliengar, K. /Cooper, S.:

461-003

Development of Elliptic Functional According to Ramanujan

This unique book provides an innovative and efficient approach to elliptic functions, based on the ideas of the great Indian mathematician Srinivasa Ramanujan. The original 1988 monograph of K Venkatachaliengar has been completely revised. Many details, omitted from the original version, have been included, and the book has been made comprehensive by notes at the end of each chapter. The book is for graduate students and researchers in Number Theory and Classical Analysis, as well for scholars and aficionados of Ramanujan's work.

Oct. 2011

184 pp.

9789814366458

7,490.

World Scientific Pub.

Musili, C.:

461-090

Representations of Finite Groups

This book serves several purposes. The first and foremost is to give an elementary introduction to the basic concepts of the theory of ordinary representations to finite groups with a minimum of prerequisites. The second purpose, which is also the main theme of this exposition, is to be able to do the theory rather explicitly for the important special case of the symmetric groups S_n of permutations on n letters. The third purpose is to use the preparatory material of the first two parts, coupled with the S_n theory, to do the same for some other important special groups, namely, the alternating group A_n and the hyperoctahedral groups B_n and D_n .

Dec. 2011

250 pp.

9789380250182

4,680.

Nadkarni, M.: **Spectral Theory of Dynamical Systems** 詳解通読 No. 154

Dec. 2011

226 pp.

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