Yurinsha Book News

Graduate Studies in Mathematics,

Vol. 124: Cox, D. /Little, J. /Schenck, H.: Toric Varieties

453-057

Toric varieties form a beautiful and accessible part of modern algebraic geometry. This book covers the standard topics in toric geometry; a novel feature is that each of the first nine chapters contains an introductory section on the necessary background material in algebraic geometry.

Other topics covered include quotient constructions, vanishing theorems, equivariant cohomology, GIT quotients, the secondary fan, and the minimal model program for toric varieties.

The subject lends itself to rich examples reflected in the 134 illustrations included in the text.

The book also explores connections with commutative algebra and polyhedral geometry, treating both polytopes and their unbounded cousins, polyhedra. There are appendices on the history of toric varieties and the computational tools available to investigate nontrivial examples in toric geometry.

Readers of this book should be familiar with the material covered in basic graduate courses in algebra and topology, and to a some what lesser degree, complex analysis. The book will be a useful reference for graduate students and researchers who are interested in algebraic geometry, polyhedral geometry, and toric varieties.

June 2011 858 pp.

9780821848197 11,870.

A. M. S.

http://www.yurinsha.com

ホームページは毎月２５日更新予定です

No. 453 Mar. 2011

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㈱　友　隣　社

Courant Lecture Notes,

Vol. 1: Qing Han /Fanghua Lin: 453-148
Elliptic Partial Differential Equations, 2nd ed.
This volume is based on PDE courses given by the authors at the Courant Institute and at the University of Notre Dame, Indiana.
Presented are basic methods for obtaining various a priori estimates for second-order equations of elliptic type with particular emphasis on maximal principles, Harnack inequalities, and their applications.
The equations considered in the book are linear; however, the presented methods also apply to nonlinear problems.
This second edition has been thoroughly revised and in a new chapter the authors discuss several methods for proving the existence of solutions of primarily the Dirichlet problem for various types of elliptic equations.
Apr. 2011 147 pp.
9780821853139 3,870.

Contemporary Mathematics,

Vol. 541: Champanerkar, A. /Dasbach, O. /Kalfagianni, F. / Kofman, I. /Neumann, W. /Stoltzfus, N. (eds.):
Interactions Between Hyperbolic Geometry, Quantum Topology and Number Theory
This book is based on a 10-day workshop given by leading experts in hyperbolic geometry, quantum topology and number theory, 453-051
in June 2009 at Columbia University.
Each speaker gave a minicourse consisting of three or four lectures aimed at graduate students and recent PhDs.
The proceedings of this enormously successful workshop can serve as an introduction to this active research area in a way that is expository and broadly accessible to graduate students.
Although many ideas overlap, the twelve expository/research papers in this volume can be grouped into four rough categories:
(1) different approaches to the Volume Conjecture, and relations between the main quantum and geometric invariants;
(2) the geometry associated to triangulations of hyperbolic 3-manifolds;
(3) arithmetic invariants of hyperbolic 3-manifolds;
(4) quantum invariants associated to knots and hyperbolic 3-manifolds.
May 2011 262 pp.
9780821849606 10,370.

Vol. 540: Bonheure, D. /Cuesta, M. /Lami Dozo, E. / Takac, P. /Van Schaftingen, J. /Willem, M. (eds.):
Nonlinear Elliptic Partial Differential Equations
This volume contains papers on semi-linear and quasi-linear elliptic equations from the workshop on Nonlinear Elliptic Partial Differential Equations, in honor of Jean-Pierre Gossez's 65th birthday, held September 2-4, 2009 at the Universite Libre de Bruxelles, Belgium.
The workshop reflected Gossez's contributions in nonlinear elliptic PDEs and provided an opening to new directions in this very active research area.
Presentations covered recent progress in Gossez's favorite topics, namely various problems related to the p-Laplacian operator, the antimaximum principle, the Fucik Spectrum, and other related subjects.
This volume will be of principle interest to researchers in nonlinear analysis, especially in partial differential equations of elliptic type. 453-111
May 2011 259 pp.
9780821849071 10,370.

A. M. S.

London Mathematical Society Lecture Note Series,

Vol. 389: **Marinucci, D. /Peccati, G.:** 453-220
Random Fields on the Sphere:
Representation, Limit Theorems & Cosmological Applications
Random Fields on the Sphere presents a comprehensive analysis of isotropic spherical random fields. The main emphasis is on tools from harmonic analysis, beginning with the representation theory for the group of rotations SO(3). Many recent developments on the method of moments and cumulants for the analysis of Gaussian subordinated fields are reviewed.
This background material is used to analyse spectral representations of isotropic spherical random fields and then to investigate in depth the properties of associated harmonic coefficients.
Aug. 2011 350 pp.
9780521175616 7,340.

Vol. 383: **Cluckers, R. /Nicaise, J. /Sebag, J.:** 453-022
Motivic Integration and Its Interactions
with Model Theory and Non-Archimedean Geometry, 1
This book assembles the different theories of motivic integration and their applications for the first time, allowing readers to compare different approaches and assess their individual strengths.
All of the necessary background is provided to make the book accessible to graduate students and researchers from algebraic geometry, model theory and number theory. Applications in several areas are included so that readers can see motivic integration at work in other domains.
In a rapidly-evolving area of research this book will prove invaluable. This first volume contains introductory texts on the model theory of valued fields, different approaches to non-Archimedean geometry, and motivic integration on algebraic varieties and non-Archimedean spaces.
Oct. 2011 350 pp.
9780521149761 7,910.

Vol. 384: **Cluckers, R. /Nicaise, J. /Sebag, J.:** 453-023
Motivic Integration and Its Interactions
with Model Theory and Non-Archimedean Geometry, 2
This second volume discusses various applications of non-Archimedean geometry, model theory and motivic integration and the interactions between these domains.
Oct. 2011 270 pp.
9781107648814 7,340.

Encyclopedia of Mathematics and its Applications,

Vol. 143: **Arapostathis, A. /Borkar, V. /Ghosh, M.:**
Ergodic Control of Diffusion Processes
A concise account of Markov process theory is followed by a complete development of the fundamental issues and formalisms in control of diffusions. This then leads to a comprehensive treatment of ergodic control, a problem that straddles stochastic control and the ergodic theory of Markov processes. The interplay between the probabilistic and ergodic-theoretic aspects of the problem, notably the asymptotics of empirical measures on one hand, and the analytic aspects leading to a characterization of optimality via the associated Hamilton-Jacobi-Bellman equation on the other, is clearly revealed.
Sep. 2011 335 pp.
9780521768405 11,190. 453-193

Cambridge

Chicago Lectures in Mathematics,

Farb, B. /Fisher, D. (eds.): 453-067
Geometry, Rigidity, and Group Actions

The study of group actions is more than a hundred years old but remains to this day a vibrant and widely studied topic in a variety of mathematic fields.
A central development in the last fifty years is the phenomenon of rigidity, whereby one can classify actions of certain groups, such as lattices in semi-simple Lie groups.
This provides a way to classify all possible symmetries of important spaces and all spaces admitting given symmetries.
Paradigmatic results can be found in the seminal work of George Mostow, Gergory Margulis, and Robert J. Zimmer, among others.
The papers in Geometry, Rigidity, and Group Actions explore the role of group actions and rigidity in several areas of mathematics, including ergodic theory, dynamics, geometry, topology, and the algebraic properties of representation varieties. In some cases, the dynamics of the possible group actions are the principal focus of inquiry.

Apr. 2011 552 pp.
9780226237886 6,440.

Navas, A.: 453-087
Groups of Circle Diffeomorphisms

"Groups of Circle Diffeomorphisms provides a great overview of the research on differentiable group actions on the circle. Navas's book will appeal to those doing research on differential topology, transformation groups, dynamical systems, foliation theory, and representation theory, and will be a solid base for those who want to further attack problems of group actions on higher dimensional manifolds or of geometric group theory." - Takashi Tsuboi
In recent years scholars from a variety of branches of mathematics have made several significant developments in the theory of group actions.
Groups of Circle Diffeomorphisms systematically explores group actions on the simplest closed manifold, the circle.
As the group of circle diffeomorphisms is an important subject in modern mathematics, this book will be of interest to those doing research in group theory, dynamical systems, low dimensional geometry and topology, and foliation theory.

May 2011 232 pp.
9780226569512 4,140.

University Of Chicago Press

AMS Chelsea Publishing,

Vol. 373: Marchenko, V.: 453-139
Sturm-Liouville Operators and Applications, Revised ed.

The asymptotic formulae for spectral functions, trace formulae, and the exact relation between the smoothness of potential and the asymptotics of eigenvalues are obtained. Also, the applications of transformation operators and their generalizations to soliton theory are considered.
The new Chapter 5 is devoted to the stability of the inverse problem solutions. The estimation of the accuracy with which the potential of the Sturm-Liouville operator can be restored from the scattering data or the spectral function, if they are only known on a finite interval of a spectral parameter, is obtained.

Apr. 2011 404 pp.
9780821853160 7,620.

AMS / Chelsea

de Gruyter Series in Nonlinear Analysis and Applications,

Vol. 15: **Al'shin, A. /Korpusov, M. /Sveshnikov, A.:**
Blow Up in Nonlinear Sobolev Type Equations

this monograph is devoted to the general problems of global-on-time solvability and blow-up for finite time of initial-value- and initial-boundary-value-problems solutions for nonlinear equations of Sobolev type.
It describes the present state of research for existence and nonexistence questions for Cauchy problems and initial-boundary value problems for linear and nonlinear Sobolev type equations.
Furthermore a numerical analysis of their solution properties is given, as well as the contemporary state of the mathematical modeling in urgent branches of physics.

May 2011 **660 pp.** **453-101**
9783110255270 **21,830.**

de Gruyter Expositions in Mathematics,

Vol. 55: **Picard, R. /McGhee, D.:** **453-146**
Partial Differential Equations: A Unified Hilbert Space Approach

This book presents a systematic approach to a solution theory for linear partial differential equations developed in a Hilbert space setting based on a Sobolev Lattice structure, a simple extension of the well established notion of a chain (or scale) of Hilbert spaces.
The focus on a Hilbert space setting is not a severe constraint, but rather a highly adaptable and suitable approach providing a more transparent framework for presenting the main issues in the development of a solution theory for partial differential equations.

May 2011 **400 pp.**
9783110250268 **20,150.**

de Gruyter Studies in Mathematics,

Vol. 38: **Kolokoltsov, V.:** **453-132**
Markov Processes, Semigroups and Generators

This monograph gives a concise, but systematic and self-contained, exposition of the essentials of Markov processes, together with recent achievements, working from the "physical picture" - a formal pre-generator, and stressing the interplay between probabilistic and analytic (semigroups) tools.
The book will be useful to students and researchers.
Part I can be used for a one-semester course on Brownian motion, Levy and Markov processes, or on probabilistic methods for PDE.
Part II mainly contains the author's research on Markov processes.

Apr. 2011 **381 pp.**
9783110250107 **16,790.**

Vol. 9: **Georgii, H.-O.:** **453-210**
Gibbs Measures and Phase Transitions, 2nd ed.

From a review of the first edition: "This book is much more than an introduction to the subject of its title. It covers in depth a broad range of topics in the mathematical theory of phase transition in statistical mechanics and as an up to date reference in its chosen topics it is a work of outstanding scholarship. It is in fact one of the author's stated aims that this comprehensive monograph should serve both as an introductory text and as a reference for the expert."

Fredos Papangelou, Zentralblatt MATH

Apr. 2011 **540 pp.**
9783110250299 **20,150.**

de Gruyter

Lecture Notes in Mathematics,

Vol. 2020: Isaev, A.: 453-128
Spherical Tube Hypersurfaces
We examine Levi non-degenerate tube hypersurfaces in complex linear space which are "spherical," that is, locally CR-equivalent to the real hyperquadric. Spherical hypersurfaces are characterized by the condition of the vanishing of the CR-curvature form, so such hypersurfaces are flat from the CR-geometric viewpoint. On the other hand, such hypersurfaces are also of interest from the point of view of affine geometry.
Thus our treatment of spherical tube hypersurfaces in this book is two-fold: CR-geometric and affine-geometric. As the book shows, spherical tube hypersurfaces possess remarkable properties.
For example, every such hypersurface is real-analytic and extends to a closed real-analytic spherical tube hypersurface in complex space.
One of our main goals is to provide an explicit affine classification of closed spherical tube hypersurfaces whenever possible.
Apr. 2011 230 pp.
9783642197826 7,550.

Vol. 2019: Adler, R. /Tayler, J.: 453-100
Topological Complexity of Smooth Random Functions
These notes, based on lectures delivered in Saint Flour, provide an easy introduction to the authors' 2007 Springer monograph "Random Fields and Geometry." While not as exhaustive as the full monograph, they are also less exhausting, while still covering the basic material, typically at a more intuitive and less technical level.
They also cover some more recent material relating to random algebraic topology and statistical applications.
The notes include an introduction to the general theory of Gaussian random fields, treating classical topics such as continuity and boundedness.
This is followed by a quick review of geometry, both integral and Riemannian, with an emphasis on tube formulae, to provide the reader with the material needed to understand and use the Gaussian kinematic formula, the main result of the notes.
May 2011 125 pp.
9783642195792 5,870.

CRM Series in Mathematical Physics

Harnad, J. (ed.): 453-125
Random Matrices, Random Processes and Integrable Systems
This book explores the remarkable connections between two domains that, a priori, seem unrelated: Random matrices (together with associated random processes) and integrable systems.
The relations between random matrix models and the theory of classical integrable systems have long been studied.
These appear mainly in the deformation theory, when parameters characterizing the measures or the domain of localization of the eigenvalues are varied.
The resulting differential equations determining the partition function and correlation functions are, remarkably, of the same type as certain equations appearing in the theory of integrable systems.
June 2011 515 pp.
9781441995131 23,510.

Springer

Trends in Logic,

Vol. 35: Mundici, D.: 453-030
Advanced Lukasiewicz Calculus and MV-Algebras

Each chapter features a combination of classical and recent results, well beyond the traditional domain of algebraic logic: among others, a comprehensive account is given of many effective procedures that have been recently developed for the algebraic and geometric objects represented by formulas in Lukasiewicz logic.
The book embodies the viewpoint that modern Lukasiewicz logic and MV-algebras provide a benchmark for the study of several deep mathematical probelems, such as Renyi conditionals of continuously valued events, the many-valued generalization of Caratheodory algebraic probability theory, morphisms and invariaant measures of rational polyhedra, bases and Schauder bases as jointly refinable partitions of unity, and first-order logic with [0,1]-valued identity on Hilbert space.

Apr. 2011 214 pp.
9789400708396 16,790.

Lecture Notes of the Unione Matematica Italiana,

Vol. 10: Albeverio, S. /Fan, . /Herzberg, F.: 453-021
Hyperfinite Dirichlet Forms and Stochastic Processes

This monograph treats the theory of Dirichlet forms from a comprehensive point of view, using "nonstandard analysis."
Thus, it is close in spirit to the discrete classical formulation of Dirichlet space theory by Beurling and Deny (1958).
The discrete infinitesimal setup makes it possible to study the diffusion and the jump part using essentially the same methods.
This setting has the advantage of being independent of special topological properties of the state space and in this sense is a natural one, valid for both finite- and infinite-dimensional spaces.
The present monograph provides a thorough treatment of the symmetric as well as the non-symmetric case, surveys the theory of hyperfinite Levy processes, and summarizes in an epilogue the model-theoretic genericity of hyperfinite stochastic processes theory.

May 2011 285 pp.
9783642196584 7,550.

Springer Series in Reliability Engineering

Nakagawa Toshio : 453-225
Stochastic Processes: With Applications to Reliability Theory

As well as providing readers with useful reliability studies and applications, Stochastic Processes also gives a basic treatment of such stochastic processes as: *the Poisson process, *the renewal process, *the Markov chain, *the Markov process, and *the Markov renewal process.
Many examples are cited from reliability models to show the reader how to apply stochastic processes.
Furthermore, Stochastic Processes gives a simple introduction to other stochastic processes such as the cumulative process, the Wiener process, the Brownian motion and reliability applications.

Feb. 2011 246 pp.
9780857292735 16,790.

Springer

Gabbay, M. /Guenthner, F. (eds.):
Handbook of Philosophical Logic, Vol. 15., 2nd ed.
Lambda Calculi: A Guide Interpolation and Definability Discourse 453-007
Representation Theory
Table of contents: Editorial Preface.- Dov M. Gabbay.- Lambda Calculi: A Guide.- Chris Hankin.- Interpolation & Definability .- Dov Gabbay and Larisa L. Maksimova.- Discourse Representation Theory .- Hans Kamp, Josef van Genabith & Uwe Reyle.

Jan. 2011 **395 pp.**
9789400704848 **23,510.**

453-008

Gabbay, M. /Guenthner, F. (eds.):
Handbook of Philosophical Logic, Vol. 16., 2nd ed.
This book is indispensable to any advanced student or researcher using logic in these areas. Topics include, Belief Revision, Refutation Systems in Propositional Logic, Quantifier Scope in Formal Linguistics and Non-deterministic Semantics for Logical Systems.
Table of contents: Editorial Preface: Dov M. Gabbay.- Belief Revision: Odinaldo Rodrigues, Dov Gabbay and Alessandra Russo.- Refutation Systems in Propositional Logic: Tomasz Skura.- Quantifier Scope in Formal Linguistics: E. G. Ruys and Yoad Winter.- Non-deterministic Semantics for Logical Systems: Arnon Avron and Anna Zamansky.

Jan. 2011 **320 pp.**
9789400704787 **23,510.**

Information Security and Cryptography,

Applebaum, B.: 453-269
Cryptography in Constant Parallell Time
This book establishes, for the first time, the possibility of NCO implementations for many basic cryptographic primitives such as one-way functions, pseudorandom generators, encryption schemes and digital signatures.
It also addresses a wide variety of fundamental questions about cryptography in NCO, and, in addition, explores the cryptographic strength of several interesting subclasses of NCO.
This includes simple forms of natural computation that can be performed by real-world dynamical systems in a constant number of steps.
The author's related thesis was honorably mentioned (runner-up) for the ACM Dissertation Award in 2007, and this book includes some expanded sections and proofs, and notes on recent developments.

Mar. 2011 **200 pp.**
9783642173660 **13,430.**

Undergraduate Topics in Computer Science

Dowek, G.: 453-025
Proofs and Algorithms:
An Introduction to Logic and Computability
Proofs and Algorithms: An Introduction to Logic and Computability is an introduction to the fundamental concepts of contemporary logic - those of a proof, a computable function, a model and a set.
It presents a series of results, both positive and negative, - Church's undecidability theorem, Godel's incompleteness theorem, the theorem asserting the semi-decidability of provability - that have profoundly changed our vision of reasoning, computation, and finally truth itself.Designed for undergraduate students, this book presents all that philosophers, mathematicians and computer scientists should know about logic.

Feb. 2011 **195 pp.**
9780857291202 **5,870.**

Springer

Wiley Series in Probability and Statistics

Ng, K.: 453-226

Dirichlet and Related Distributions: Theory, Methods and Applications

This book provides a comprehensive review on the Dirichlet distribution including its basic properties, marginal and conditional distributions, cumulative distribution and survival functions.
The authors provide insight into new materials such as survival function, characteristic functions for two uniform distributions over the hyper-plane and simplex distribution for linear function of Dirichlet components estimation via the expectation-maximization gradient algorithm and application.
Two new families of distributions (GDD and NDD) are explored, with emphasis on applications in incomplete categorical data and survey data with non-response.

Apr. 2011 336 pp.
9780470688199 13,120.

Robert, C. /Mengersen, K. /Titterington, M.: 453-230

Mixture Estimation and Applications

This book uses the EM (expectation maximization) algorithm to simultaneously estimate the missing data and unknown parameter(s) associated with a data set. The parameters describe the component distributions of the mixture; the distributions may be continuous or discrete. The editors provide a complete account of the applications, mathematical structure and statistical analysis of finite mixture distributions along with MCMC computational methods, together with a range of detailed discussions covering the applications of the methods and features chapters from the leading experts on the subject.

Apr. 2011 328 pp.
9781119993896 12,500.

Montgomery, D.: 453-223

Introduction to Linear Regression Analysis, 5th ed.

Beginning with a general introduction to regression modeling, including typical applications, the book then outlines a host of technical tools that form the linear regression analytical arsenal, including: basic inference procedures and introductory aspects of model adequacy checking; how transformations and weighted leastsquares can be used to resolve problems of model inadequacy; how to deal with influential observations; and polynomial regression models and their variations.

Apr. 2011 672 pp.
9780470542811 15,620.

Statistics in Practice

Lui, K.-J.: 453-216

Binary Data Analysis of Randomized Clinical Trials with Noncompliance

This book provides a systematic and organized approach to analyzing data for RCTs with noncompliance under the most frequently-encountered situations. These include parallel sampling, stratified sampling, cluster sampling, parallel sampling with subsequent missing outcomes, and a series of dependent Bernoulli sampling for repeated measurements.

Apr. 2011 320 pp.
9780470660959 13,120.

Wiley

Mohrhoff, U.: 453-012

The World According to Quantum Mechanics:
Why the Laws of Physics Make Perfect Sense After All

The first of the book's three parts familiarizes the reader with the basics through a brief historical survey and by following Feynman's route to the Schrodinger equation.
The necessary mathematics, including the special theory of relativity, is introduced along the way, to the point that all relevant theoretical concepts can be adequately grasped.

Jan. 2011 300 pp.
9789814293372 10,120.

Series on Knots and Everything,

Radford, D.: 453-090

Hopf Algebras

The book provides a detailed account of basic coalgebra and Hopf algebra theory with emphasis on Hopf algebras which are pointed, semisimple, quasitriangular, or are of certain other quantum groups.
It is intended to be a graduate text as well as a research monograph.
Contents: Coalgebras Representations of Coalgebras Filtrations and Gradings on Coalgebras Bialgebras The Convolution Algebra Hopf Algebras Hopf Modules and Co-Hopf Modules Hopf Algebras as Modules Over Their Hopf Subalgebras Integrals Actions by Bialgebras and Hopf Algebras Quasitriangular Bialgebras and Hopf Algebras The Drinfel'd Double Co-Quasitriangular Bialgebras and Hopf Algebras Pointed Hopf Algebras Finite-Dimensional Hopf Algebras Over a Field of Characteristic Zero

Oct. 2011 500 pp.
9789814335997 12,250.

QP-PQ: Quantum Probability and White Noise Analysis,

Vol. 27: Rebolledo, R. /Orszag, M. (eds.): 453-150

Quantum Probability and Related Topics:
Proceedings of the 30th Conference Santiago, 2009

This volume contains current work at the frontiers of research in quantum probability, infinite dimensional stochastic analysis, quantum information and statistics. It presents a carefully chosen collection of articles by experts to highlight the latest developments in those fields.

Jan. 2011 340 pp.
9789814338738 14,500.

Nankai Series in Pure, Applied Mathematics and Theoretical Physics,

Vol. 8: Chengming Bai /Mo-Lin Ge /Naihuan Jing (eds.):

Quantized Algebra and Physics:
Proceeding of International Workshop Tianjin, 2009

The book aims to survey recent developments in quantum algebras and related topics. Quantum groups were introduced by Drinfeld and Jimbo in 1985 in their work on Yang-Baxter equations. The subject from the very beginning has been an interesting one for both mathematics and theoretical physics. For example, Yangian is a special example of quantum group, corresponding to rational solution of Yang-Baxter equation.

Feb. 2011 250 pp. 453-053
9789814340441 11,250.

World Scientific Pub.

Asterisque,

Vol. 337: **Bunke, U. /Schick, T. /Spitzweck, M.:** 453-045

Periodic Twisted Cohomology and T-duality

The main motivation of this work is a topological interpretation of two-periodic twisted de Rham cohomology which is generalizable to arbitrary topological spaces and at the same time to arbitrary coefficients.
To this end we develop a sheaf theory in the context of locally compact topological stacks with emphasis on: *the construction of the sheaf theory operations in unbounded derived categories *elements of Verdier duality *and integration.
The main result is the construction of a functorial periodization associated to a -gerbe.

2011 ....
9782856293072 価格未定

Memoires de la Societe Mathematique de France,

Numero 123: **Hsiao, C.-Y.:** 453-127

Projections in Several Complex Variables

This work consists two parts. In the first part, the author studies completely the heat equation method of Menikoff-Sjostrand and applies it to the Kohn Laplacian defined on a compact orientable connected CR manifold. He then gets the full asymptotic expansion of the Szego projection for (0, q) forms when the Levi form is non-degenerate.
This generalizes a result of Boutet de Monvel and Sjostrand for (0,0) forms. The author's main tools are Fourier integral operators with complex valued phase Melin and Sjostrand functions. In the second part, the author obtains the full asymptotic expansion of the Bergman projection for (0, q) forms when the Levi form is non-degenerate. This also generalizes a result of Boutet de Monvel and Sjostrand for (0,0) forms.

Feb. 2011 **136 pp.**
9782856293041 **5,330.**

Numero 122: **De Thelin, H. /Vigny, G.:** 453-117

Entropy of Meromorphic Maps and Dynamics of Birational Maps

The authors study the dynamics of meromorphic maps for a compact Kahler manifold X. More precisely, they give a simple criterion that allows them to produce a measure of maximal entropy.
They can apply this result to bound the Lyapunov exponents.
The authors then study the particular case of a family of generic birational maps of \mathbb{P} ^k for which they construct the Green currents and the equilibrium measure. They use for that the theory of super-potentials. They show that the measure is mixing and gives no mass to pluripolar sets. Using the criterion they get that the measure is of maximal entropy. This implies finally that the measure is hyperbolic.

Feb. 2011 **98 pp.**
9782856293027 **6,770.**

Numero 121: **Rees, M.:** 詳報掲載 No. 090

A Fundamental Domain for V3

Mar. 2011 *139 pp.* *9782856293010* *6,220.*

Numero 119: **Demange, B.:** 詳報掲載 No. 118

Uncertainty Principles Associated to Non-Degenerate Quadratic Forms

Dec. 2010 *102 pp.* *9782856292976* *6,220.*

The Societe Mathematique de France