

Papers to appear in forthcoming issues

Abért, M. and Elek, G.	Dynamical properties of profinite actions
Abért, M. and Weiss, B.	Bernoulli actions are weakly contained in any free action
Arbieto, A., Markarian, R., Pacífico, M. J. and Soares, R.	Scaling rate for semi-dispersing billiards with non-compact cusps
Assani, I. and Presser, K.	Pointwise characteristic factors for the multiterm return times theorem
Austin, T.	Norm convergence of continuous-time polynomial multiple ergodic averages
Bárány, B.	Dimension of the generalized 4-corner set and its projections
Barański, K., Karpińska, B. and Zdunik, A.	Bowen's formula for meromorphic functions
Bergelson, V., Leibman, A. and Moreira, C. G.	From discrete- to continuous-time ergodic theorems
Bergweiler, W.	Fatou–Julia theory for non-uniformly quasiregular maps
Biswas, K.	Simultaneous linearization of germs of commuting holomorphic diffeomorphisms
Bousch, T.	La distance de réarrangement, duale de la fonctionnelle de Bowen
Bowen, L.	Sofic entropy and amenable groups
Brémont, J. and Buczolich, Z.	Maximizing points and coboundaries for an irrational rotation on a circle
Bruin, H. and Leplaideur, R.	Renormalization and thermodynamic formalism in subshifts
Burger, M. and Iozzi, A.	Bounded cohomology and totally real subspaces in complex hyperbolic geometry
Burton, R. and Park, K. K.	Spatial determinism for a free Z^2 -action
Carlsen, T. M. and Thomsen, K.	The structure of the C^* -algebra of a locally injective surjection
Carminati, C. and Tiozzo, G.	A canonical thickening of \mathbb{Q} and the entropy of α -continued fraction transformations
Chaika, J.	There exists a topologically mixing interval exchange transformation
Chazottes, J.-R. and Collet, P.	Poisson approximation for the number of visits to balls in non-uniformly hyperbolic dynamical systems
Chazottes, J.-R., Gambaudo, J.-M., Hochman, M. and Ugalde, E.	On the finite-dimensional marginals of shift-invariant measures
Cheung, Y., Goetz, A. and Quas, A.	Piecewise isometries, uniform distribution and $3 \log 2 - \pi^2/8$

- Chu, Q. and Frantzikinakis, N. Pointwise convergence for cubic and polynomial multiple ergodic averages of non-commuting transformations
- Conze, J.-P. and Gutkin, E. On recurrence and ergodicity for geodesic flows on non-compact periodic polygonal surfaces
- Cortez, M. I. and Rivera-Letelier, J. Topological orbit equivalence classes and numeration scales of logistic maps
- Dani, S. G. BOOK REVIEW 'Ergodic Theory: with a view towards Number Theory' by Manfred Einsiedler and Thomas Ward
- Danilenko, A. I. A survey on spectral multiplicities of ergodic actions
- Danilenko, A. I. New spectral multiplicities for mixing transformations
- Deaconu, V., Kumjian, A. and Quigg, J. Group actions on topological graphs
- Demers, M. F., Wright, P. and Young, L.-S. Entropy, Lyapunov exponents and escape rates in open systems
- Dias, K. Enumerating combinatorial classes of the complex polynomial vector fields in \mathbb{C}
- Dolgopyat, D., Freidlin, M. and Korolov, L. Deterministic and stochastic perturbations of area preserving flows on a two-dimensional torus
- Dong, P., Donoso, S., Maass, A., Shao, S. and Ye, X. Infinite-step nilsystems, independence and complexity
- Dooley, A. H. and Golodets, V. Ya. On the entropy of actions of nilpotent Lie groups and their lattice subgroups
- Dooley, A. H. and Rudolph, D. J. Non-uniqueness in G -measures
- Dooley, A. H. and Zhang, G. Co-induction in dynamical systems
- Downarowicz, T. and Serafin, J. A short proof of the Ornstein theorem
- Fang, C., Huang, W., Yi, Y. and Zhang, P. Dimensions of stable sets and scrambled sets in positive finite entropy systems
- Fang, Y. Invariant rigid geometric structures and expanding maps
- Farina, A. and Valdinoci, E. Some results on minimizers and stable solutions of a variational problem
- Ferguson, A. and Pollicott, M. Escape rates for Gibbs measures
- Fiebig, D. Canonical compactifications for Markov shifts
- Fried, D., Marotta, S. M. and Stankewitz, R. Complex dynamics of Möbius semigroups
- Gadre, V. S. Dynamics of non-classical interval exchanges
- Glasner, E. and Weiss, B. On Hilbert dynamical systems
- Goldman, W. M. and Labourie, F. Geodesics in Margulis spacetimes
- Gomes, J. B. and Ruggiero, R. O. On Finsler surfaces without conjugate points
- Gorodnik, A. and Nevo, A. On Arnol'd's and Kazhdan's equidistribution problems
- Guivarc'h, Y. and Raja, C. R. E. Recurrence and ergodicity of random walks on linear groups and on homogeneous spaces
- Hartman, Y. Large semigroups of cellular automata
- Haydn, N., Nicol, M., Persson, T. and Vaienti, S. A note on Borel–Cantelli lemmas for non-uniformly hyperbolic dynamical systems

- Hochman, M. Slow entropy and differentiable models for infinite measure-preserving \mathbb{Z}^k actions
- Holt, E. A ratio ergodic theorem for Borel actions of $\mathbb{Z}^d \times \mathbb{R}^k$
- Homburg, A. J. Circle diffeomorphisms forced by expanding circle maps
- Hua, Q. Continuity of packing measure function of self-similar iterated function systems
- Jiang, M. Differentiating potential functions of SRB measures on hyperbolic attractors
- Kalikow, S. Infinite partitions and Rokhlin towers
- Kalikow, S. Non-intersecting splitting σ -algebras in a non-Bernoulli transformation
- Katok, S. and Ugarcovici, I. Applications of (a, b) -continued fraction transformations
- Kenyon, R., Peres, Y. and Solomyak, B. Hausdorff dimension for fractals invariant under the multiplicative integers
- Kerr, D. and Nowak, P. W. Residually finite actions and crossed products
- Kesseböhmer, M., Munday, S. and Stratmann, B. O. Strong renewal theorems and Lyapunov spectra for α -Farey and α -Lüroth systems
- Kida, Y. Examples of amalgamated free products and coupling rigidity
- KloECKner, B. Optimal transport and dynamics of expanding circle maps acting on measures
- Kosloff, Z. The zero-type property and mixing of Bernoulli shifts
- KuŁaga, J. On the self-similarity problem for smooth flows on orientable surfaces
- Kwietniak, D. and Oprocha, P. On weak mixing, minimality and weak disjointness of all iterates
- Lemańczyk, M. and Parreau, F. Lifting mixing properties by Rokhlin cocycles
- Li, Y., Chen, E. and Cheng, W.-C. Tail pressure and the tail entropy function
- Li, Z., Góra, P., Boyarsky, A., Proppe, H. and Eslami, P. Family of piecewise expanding maps having singular measure as a limit of ACIMs
- Liang, C., Sun, W. and Tian, X. Ergodic properties of invariant measures for $C^{1+\alpha}$ non-uniformly hyperbolic systems
- Liao, L. and Seuret, S. Diophantine approximation by orbits of expanding Markov maps
- Liao, L. and Steiner, W. Dynamical properties of the negative beta transformation
- de Lima, A. and Smania, D. On infinitely cohomologous to zero observables
- Lindenstrauss, E. and Shapira, U. Homogeneous orbit closures and applications
- Liverani, C. Multidimensional expanding maps with singularities: a pedestrian approach
- Lyons, R. Fixed price of groups and percolation
- Maderna, E. On weak KAM theory for N -body problems
- Marcus, B. and Pavlov, R. Approximating entropy for a class of \mathbb{Z}^2 Markov random fields and pressure for a class of functions on \mathbb{Z}^2 shifts of finite type
- Matheron, É. Subsemigroups of transitive semigroups

- Mauduit, C. and Moreira, C. G. Generalized Hausdorff dimensions of sets of real numbers with zero entropy expansion
- Mayer, V. and Rempe, L. Rigidity and absence of line fields for meromorphic and Ahlfors islands maps
- Melbourne, I. and Török, A. Convergence of moments for Axiom A and non-uniformly hyperbolic flows
- Miernowski, T. and Nogueira, A. Exactness of the Euclidean algorithm and of the Rauzy induction on the space of interval exchange transformations
- Mihaljević-Brandt, H. Dynamical approximation and kernels of non-escaping-hyperbolic components
- Möller, M. and Pohl, A. D. Period functions for Hecke triangle groups, and the Selberg zeta function as a Fredholm determinant
- Moss, A. and Walkden, C. P. Stable topological transitivity properties of \mathbb{R}^n -extensions of hyperbolic transformations
- Navas, A. An L^1 ergodic theorem with values in a non-positively curved space via a canonical barycenter map
- Peng, W., Yin, Y. and Zhai, Y. Density of hyperbolicity for rational maps with Cantor Julia sets
- Peter, J. Hausdorff measure of escaping and Julia sets for bounded-type functions of finite order
- Petersen, K. An adic dynamical system related to the Delannoy numbers
- Petersen, C. L. and Roesch, P. Carrots for dessert
- Poirier, A. Hubbard forests
- Ponce, M. Towards a semi-local study of parabolic invariant curves for fibered holomorphic maps
- Quas, A. and Siefken, J. Ergodic optimization of super-continuous functions in the shift
- Reeve, H. W. J. The packing spectrum for Birkhoff averages on a self-affine repeller
- Rodriguez Hertz, F., Rodriguez Hertz, M. A., Tahzibi, A. and Ures, R. Maximizing measures for partially hyperbolic systems with compact center leaves
- Rousseau, J. Recurrence rates for observations of flows
- Schneider, M. Alexandrov embedded closed magnetic geodesics on S^2
- Szarek, T. and Worm D. T. H. Ergodic measures of Markov semigroups with the ϵ -property
- Tsujii, M. Contact Anosov flows and the Fourier–Bros–Iaglonitzer transform
- Wang, Z. Rigidity of commutative non-hyperbolic actions by toral automorphisms
- Yildiz, I. B. Discontinuity of topological entropy for Lozi maps
- Yu, B. The templates of non-singular Smale flows on three manifolds

Great Titles *from* Cambridge University Press!

Localization in Periodic Potentials

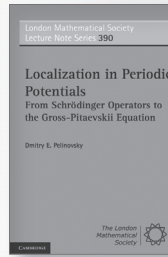
From Schrödinger Operators to the Gross–Pitaevskii Equation

DMITRY E. PELINOVSKY

London Mathematical Society Lecture Note Series

Preface; 1. Formalism of the nonlinear Schrödinger equations; 2. Justification of the nonlinear Schrödinger equations; 3. Existence of localized modes in periodic potentials; 4. Stability of localized modes; 5. Traveling localized modes in lattices; Appendix A. Mathematical notations; Appendix B. Selected topics of applied analysis; References; Index.

\$85.00: Pb: 978-1-107-62154-1: 408 pp.

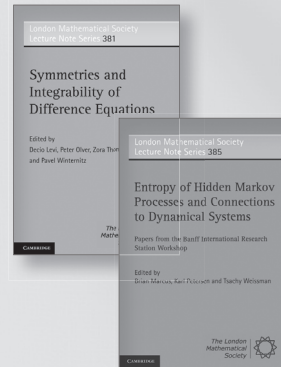


Symmetries and Integrability of Difference Equations

Edited by DECIO LEVI, PETER OLVER, ZORA THOMOVA, and PAVEL WINTERNITZ

London Mathematical Society Lecture Note Series

\$65.00: Pb: 978-0-521-13658-7: 360 pp.



Ordinary Differential Equations

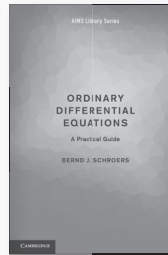
A Practical Guide

BERND J. SCHROERS

AIMS Library of Mathematical Sciences

Preface; 1. First order differential equations; 2. Systems and higher order equations; 3. Second order equations and oscillations; 4. Geometric methods; 5. Projects; Bibliography; Index.

\$25.99: Pb: 978-1-107-69749-2: 128 pp.



Nonlinear Dispersive Waves

Asymptotic Analysis and Solitons

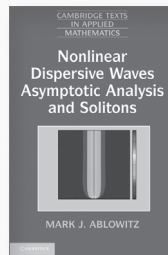
MARK J. ABLOWITZ

Cambridge Texts in Applied Mathematics

Preface; Acknowledgements; Part I. Fundamentals and Basic Applications: 1. Introduction; 2. Linear and nonlinear wave equations; 3. Asymptotic analysis of wave equations; 4. Perturbation analysis; 5. Water waves and KdV type equations; 6. Nonlinear Schrödinger models and water waves; 7. Nonlinear Schrödinger models in nonlinear optics; Part II. Integrability and Solitons: 8. Solitons and integrable equations; 9. Inverse scattering transform for the KdV equation; Part III. Novel Applications of Nonlinear Waves: 10. Communications; 11. Mode-locked lasers; 12. Nonlinear photonic lattices; References; Index.

\$115.00: Hb: 978-1-107-01254-7: 362 pp.

\$60.00: Pb: 978-1-107-66410-4



Entropy of Hidden Markov Processes and Connections to Dynamical Systems

Papers from the Banff International Research Station Workshop

Edited by BRIAN MARCUS, KARL PETERSEN, and TSACHY WEISSMAN

London Mathematical Society Lecture Note Series

\$75.00: Pb: 978-0-521-11113-3: 278 pp.

Prices subject to change.



CAMBRIDGE

JOURNALS

Combinatorics, Probability and Computing

Editor-in-Chief

Béla Bollobás, *DPMMS, Cambridge, UK; University of Memphis, USA*

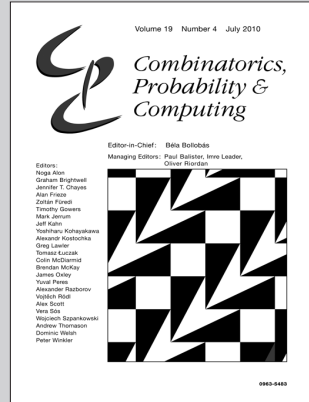
Published bimonthly, *Combinatorics, Probability & Computing* is devoted to the three areas of combinatorics, probability theory and theoretical computer science. Topics covered include classical and algebraic graph theory, extremal set theory, matroid theory, probabilistic methods and random combinatorial structures; combinatorial probability and limit theorems for random combinatorial structures; the theory of algorithms (including complexity theory), randomised algorithms, probabilistic analysis of algorithms, computational learning theory and optimisation.

Price information

is available at: <http://journals.cambridge.org/cpc>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/cpc-alerts>



Combinatorics, Probability and Computing

is available online at:
<http://journals.cambridge.org/cpc>

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

For free online content visit:
<http://journals.cambridge.org/cpc>



CAMBRIDGE
UNIVERSITY PRESS

INSTRUCTIONS FOR CONTRIBUTORS

Editorial Policy

The journal welcomes high quality contributions on topics closely related to dynamical systems and ergodic theory. Submissions in the field of differential geometry, number theory, operator algebra, differential, topological, symbolic, measurable dynamics and celestial and statistical mechanics are especially welcome. Expository survey papers and reviews of relevant books will be published from time to time.

Submission of manuscripts

Manuscripts should be submitted to an executive or managing editor whose interest is closest to the material of their article. In case of doubt authors may send manuscripts to the Managing Editors at the University of Warwick. Manuscripts may be submitted electronically in pdf or ps form as an attachment to an email, i.e. not in the body of an email. Please also send the \TeX file. If you are unable to do this, please submit the manuscript in printed form. The editor in charge of the paper will acknowledge receipt of the paper. **It is important that authors inform the editor of any changes of postal and/or e-mail address while their paper is under consideration.**

Submission of a paper is taken to imply that it has not been previously published and that it is not being considered for publication elsewhere. Authors of articles published in the journal assign copyright to Cambridge University Press (with certain rights reserved) and you will receive a copyright assignment form for signature on acceptance of your paper.

The journal strongly recommends submission of accepted papers in \LaTeX using the ETDS \LaTeX class file. Papers that use this class file will be processed more efficiently. A $\text{\LaTeX}2\epsilon$ file `etds.cls` is available via anonymous ftp from the Cambridge University Press site at `ftp.cup.cam.ac.uk` in the directory `/pub/texarchive/journals/latex/etds-cls/`. In case of difficulties with these files, please contact `etds@sunrise-setting.co.uk` or the Journal editorial office at `etds@maths.warwick.ac.uk`. Alternatively, authors may use 'article' style.

On final acceptance of a paper, authors should send the \LaTeX source code via e-mail including the figures (line figures only) and all author-defined macro and style files, to the Managing Editors, together with a pdf produced using the same file. The publisher reserves the right to typeset any article by conventional means if the author's \TeX code presents problems in production.

Manuscript

Papers should be typed, double-spaced, with generous margins. The pages must be numbered.

The first page should give the title, the author's name and institution, and a short abstract intelligible to mathematicians.

The title, while brief, must be informative (e.g. 'A new proof of the ergodic theorem', whereas 'Some applications of a theorem of Birkhoff' would be useless).

Notation

Avoid abbreviations such as Thm, Prop., Eq., iff. In the text do not use symbols \forall , \exists , \Rightarrow and \Leftrightarrow . Fractions are generally best expressed by a solidus. Complicated exponents like $\exp\{z^2 \sin \theta / (1 + y^2)\}$ should be shown in this and no other way.

It helps if displayed equations or statements which will be quoted later are numbered in order on the right of their line. They can then be referred to by, for example, 'from (7)'.

If an author wishes to mark the end of the proof of a theorem, the sign \square may be used.

Footnotes should be avoided.

Figures

Graphics should be prepared to professional standards, preferably using Postscript or \LaTeX drawing facilities. Each text figure must be numbered as Figure 1, Figure 2, ... and its intended position clearly indicated in the manuscript. Figures should be used sparingly and only when they greatly clarify the exposition. The preferred resolutions for submission of electronic artwork are: halftone images 300 dpi; line tone 600 dpi; bitmap 1200 dpi.

Tables

Tables should be numbered (above the table) as Table 1, Table 2, Indicate the position of each in the text as for figures.

References

References should be collected at the end of the paper numbered in alphabetical order of the author's names or by order of citation. Include in the list of references only those works that are cited. For the style of references please consult recent issues of the journal. A reference to a book should give the title, in italics, and then in roman type the publisher's name and the place and year of publication:

[4] N. Dunford and J. T. Schwartz. *Linear Operators*. Part I. Wiley, New York, 1958.

A reference to a paper should give in italics the title of the periodical, the number of the volume and year, and the beginning and end pages of the paper. Journal titles should be abbreviated as in *Mathematical Reviews*:

[6] J. E. Littlewood. The 'pits effect' for functions in the unit circle. *J. Analyse Math.* **23** (1970), 236–268.

Proofs

Authors receive one pdf proof for correction. Typographical and minor corrections only are permitted at this stage. For papers with more than one author the proofs are sent to the first named author unless the editor receives other instructions. It is important that proofs are corrected and returned promptly.

Offprints

No paper offprints are provided, but the corresponding author will be sent the pdf of the published article. Print offprints may be purchased at extra cost at proof stage.

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Ergodic theory and dynamical systems

VOLUME 32 PART 1 FEBRUARY 2012

CONTENTS

<i>Berger, P.</i> Structural stability of attractor–repellor endomorphisms with singularities	1
<i>Brownlowe, N., An Huef, A., Laca, M. and Raeburn, I.</i> Boundary quotients of the Toeplitz algebra of the affine semigroup over the natural numbers	35
<i>Buzzi, J., Fisher, T., Sambarino, M. and Vásquez, C.</i> Maximal entropy measures for certain partially hyperbolic, derived from Anosov systems	63
<i>Ceccherini-Silberstein, T. and Coornaert, M.</i> A Garden of Eden theorem for linear subshifts	81
<i>Dooley, A. H. and Hagihara, R.</i> Computing the critical dimensions of Bratteli–Vershik systems with multiple edges	103
<i>Hochman, M.</i> On notions of determinism in topological dynamics	119
<i>Kadyrov, S.</i> Positive entropy invariant measures on the space of lattices with escape of mass	141
<i>Kaloshin, V. and Kozlovski, O. S.</i> A C^r unimodal map with an arbitrary fast growth of the number of periodic points	159
<i>Le Roux, F.</i> There is no minimal action of \mathbb{Z}^2 on the plane	167
<i>Lim, S. and Oh, H.</i> On the distribution of orbits of geometrically finite hyperbolic groups on the boundary	173
<i>Lima, Y.</i> \mathbb{Z}^d -actions with prescribed topological and ergodic properties	191
<i>López-Hernanz, L.</i> Summable formal invariant curves of diffeomorphisms	211
<i>Melbourne, I., Niţică, V. and Török, A.</i> Transitivity of Heisenberg group extensions of hyperbolic systems	223
<i>Mohammadi, A.</i> A special case of effective equidistribution with explicit constants	237
<i>Peterson, J. and Sinclair, T.</i> On cocycle superrigidity for Gaussian actions	249
<i>Rørdam, M. and Sierakowski, A.</i> Purely infinite C^* -algebras arising from crossed products	273
<i>Stoyanov, L.</i> Non-integrability of open billiard flows and Dolgopyat-type estimates	295
Papers to appear in forthcoming issues	315

Cambridge Journals Online
For further information about this journal
please go to the journal website at:
journals.cambridge.org/ets



MIX
Paper from
responsible sources
FSC® C018127

CAMBRIDGE
UNIVERSITY PRESS