# Papers to appear in forthcoming issues

Aliste-Prieto, J. and Coronel, D.	Tower systems for linearly repetitive Delone sets
Arbieto, A., Markarian, R., Pacifico, M. J. and Soares, R.	Scaling rate for semi-dispersing billiards with non-compact cusps
Austin, T.	Norm convergence of continuous-time polynomial multiple ergodic averages
Barański, K., Karpińska, B. and Zdunik, A.	Bowen's formula for meromorphic functions
Bárány, B.	Dimension of the generalized 4-corner set and its projections
Barge, M. and Martensen, B. F.	Classification of expansive attractors on surfaces
Berger, P.	Structural stability of attractor-repellor endomorphisms with singularities
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
Brownlowe, N., an Huef, A., Laca, M. and Raeburn, I.	Boundary quotients of the Toeplitz algebra of the affine semigroup over the natural numbers
Burger, M. and Iozzi, A.	Bounded cohomology and totally real subspaces in complex hyperbolic geometry
Buzzi, J., Fisher, T., Sambarino, M. and Vásquez, C.	Maximal entropy measures for certain partially hyperbolic, derived from Anosov systems
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 $\alpha$ -continued fraction transformations
Carvalho, A. N. and Cholewa, J. W.	Exponential global attractors for semigroups in metric spaces with applications to differential equations
Ceccherini-Silberstein, T. and Coornaert, M.	A Garden of Eden theorem for linear subshifts
Chaika, J.	There exists a topologically mixing interval exchange transformation
Chazottes, JR., Gambaudo, JM., Hochman, M. and Ugalde, E.	On the finite-dimensional marginals of shift-invariant measures
Chu, Q. and Frantzikinakis, N.	Pointwise convergence for cubic and polynomial multiple ergodic averages of non-commuting transformations
Cortez, M. I. and Rivera-Letelier, J.	Topological orbit equivalence classes and numeration scales of logistic maps

## Forthcoming issues

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, LS.	Entropy, Lyapunov exponents and escape rates in open systems
Dolgopyat, D., Freidlin, M. and Koralov, L.	Deterministic and stochastic perturbations of area preserving flows on a two-dimensional torus
Dooley, A. H. and Golodets, V. Ya.	On the entropy of actions of nilpotent Lie groups and their lattice subgroups
Dooley, A. H. and Hagihara, R.	Computing the critical dimensions of Bratteli–Vershik systems with multiple edges
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
Fan, S., Liu, QH. and Wen ZY.	Gibbs-like measure for spectrum of a class of quasi-crystals
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
Fried, D.	Ideal tilings and symbolic dynamics for negatively curved surfaces
Fried, D., Marotta, S. M. and Stankewitz, R.	Complex dynamics of Möbius semigroups
Glasner, E. and Weiss, B.	On Hilbert dynamical systems
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
Hochman, M.	On notions of determinism in topological dynamics
Hua, Q.	Continuity of packing measure function of self-similar iterated function systems
Jiang, M.	Differentiating potential functions of SRB measures on hyperbolic attractors
Kadyrov, S.	Positive entropy invariant measures on the space of lattices with escape of mass
Kalikow, S.	Infinite partitions and Rokhlin towers
Kalikow, S.	Non-intersecting splitting $\sigma$ -algebras in a non-Bernoulli transformation
Kaloshin, V. and Kozlovski, O. S.	A $C^r$ unimodal map with an arbitrary fast growth of the number of periodic points
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 $\alpha$ -Farey and $\alpha$ -Lüroth systems
Kosloff, Z.	On a type III <sub>1</sub> Bernoulli shift
Kułaga, J.	On the self-similarity problem for smooth flows on orientable surfaces
Kwapisz, J.	Rigidity and mapping class group for abstract tiling spaces
Kwietniak, D. and Oprocha, P.	On weak mixing, minimality and weak disjointness of all iterates
Le Roux, F.	There is no minimal action of $\mathbb{Z}^2$ on the plane
Li, Y., Chen, E. and Cheng, WC.	Tail pressure and the tail entropy function
Liao, L. and Steiner, W.	Dynamical properties of the negative beta transformation
Lim, S. and Oh, H.	On the distribution of orbits of geometrically finite hyperbolic groups on the boundary
Lima, Y.	$\mathbb{Z}^d$ -actions with prescribed topological and ergodic properties
Lindenstrauss, E. and Shapira, U.	Homogeneous orbit closures and applications
López-Hernanz, L.	Summable formal invariant curves of diffeomorphisms
Maderna, E.	On weak KAM theory for N-body problems
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., Nițică, V. and Török, A.	Transitivity of Heisenberg group extensions of hyperbolic systems
Melbourne, I. and Török, A.	Convergence of moments for Axiom A and non-uniformly hyperbolic flows
Mihaljević-Brandt, H.	Dynamical approximation and kernels of non-escaping-hyperbolic components
Mohammadi, A.	A special case of effective equidistribution with explicit constants
Moss, A. and Walkden, C. P.	Stable topological transitivity properties of $\mathbb{R}^n$ -extensions of hyperbolic transformations
Peng, W., Yin, Y. and Zhai, Y.	Density of hyperbolicity for rational maps with Cantor Julia sets
Petersen, K.	An adic dynamical system related to the Delannoy numbers
Peterson, J. and Sinclair, T.	On cocycle superrigidity for Gaussian actions
Polo, F.	Equidistribution of singular measures on nilmanifolds and skew products
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
Rørdam, M. and Sierakowski, A.	Purely infinite $C^*$ -algebras arising from crossed products
Rousseau, J.	Recurrence rates for observations of flows

## Forthcoming issues

Sadun, L.	Exact regularity and the cohomology of tiling spaces
Schneider, M.	Alexandrov embedded closed magnetic geodesics on $S^2$
Schweitzer, S. J. P. A.	Normal subgroups of diffeomorphism and homeomorphism groups of $R^n$ and other open manifolds
Stoyanov, L.	Non-integrability of open billiard flows and Dolgopyat type estimates
Szarek, T. and Worm D. T. H.	Ergodic measures of Markov semigroups with the e-property
Tapie, S.	A variation formula for the topological entropy of convex-cocompact manifolds
Tsujii, M.	Contact Anosov flows and the Fourier–Bros–Iaglonitzer transform
Wang, Z.	Rigidity of commutative non-hyperbolic actions by toral automorphisms
Yarmola, T.	An example of a pathological random perturbation of the Cat Map
Yildiz, I. B.	Discontinuity of topological entropy for Lozi maps
Yoo, J.	Measures of maximal relative entropy with full support
Yu, B.	The templates of non-singular Smale flows on three manifolds

## CAMBRIDGE

## Great Titles from Cambridge University Press!

#### Nonlinear Dispersive Waves

Asymptotic Analysis and Solitons

Mark J.Ablowitz

Cambridge Texts in Applied Mathematics \$115.00: Hardback: 978-1-107-01254-7: 360 pp \$60.00: Paperback: 978-1-107-66410-4

#### Localization in Periodic Potentials

From Schrödinger Operators to the Gross-Pitaevskii Equation

DMITRY E. PELINOVSKY

London Mathematical Society Lecture Note Series \$85.00: Paperback: 978-1-107-62154-1: 416 pp

#### **Rigidity in Higher Rank Abelian Group Actions**

Volume 1: Introduction and Cocycle Problem

ANATOLE KATOK, VIOREL NITICA

*Cambridge Tracts in Mathematics* \$85.00: Hardback: 978-0-521-87909-5: 320 pp

# Symmetries and Integrability of Difference Equations

DECIO LEVI, PETER OLVER, ZORA THOMOVA,

PAVEL WINTERNITZ London Mathematical Society Lecture Note Series \$65.00: Paperback: 978-0-521-13658-7: 360 pp

#### **Entropy in Dynamical Systems**

TOMASZ DOWNAROWICZ New Mathematical Monographs \$90.00: Hardback: 978-0-521-88885-1: 404 pp

### Sources in the Development of Mathematics

Series and Products from the Fifteenth to the Twenty-first Century

RANJAN ROY \$99.00: Hardback: 978-0-521-11470-7: 1,000 pp

www.cambridge.org/us/mathematics 800.872.7423





## JOURNALS

# Journal of the Institute of Mathematics of Jussieu

Published for The Institute of Mathematics of Jussieu

#### **Editor-in-Chief**

Michael Harris, Institut de mathematiques de Jussieu, France

Journal of the Institute of Mathematics of Jussieu covers all domains in pure mathematics. It includes important research articles from areas such as: operator algebras, number theory, algebraic and Lie groups, differential and algebraic geometry, partial differential equations, Banach spaces, differential and algebraic topology, dynamical systems, and logic.

The international editorial board naturally draws upon the broad expertise of the highly prestigious Jussieu Mathematical Institute in Paris.

Price information is available at: http://journals.cambridge.org/jmj

### **Free email alerts**

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

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





Journal of the Institute of Mathematics of Jussieu is available online at: http://journals.cambridge.org/jmj

#### To subscribe contact Customer Services

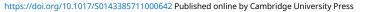
in Cambridge: Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

#### in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions\_newyork@cambridge.org

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 T<sub>E</sub>X 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 LATEX2e 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  $\Box$  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 31 PART 5 OCTOBER 2011

#### CONTENTS

<i>Bekka, B. and Heu, JR.</i> Random products of automorphisms of Heisenberg nilmanifolds and Weil's representation	1277
<i>Bounemoura, A.</i> Generic super-exponential stability of invariant tori in Hamiltonian systems	1287
<i>Bundfuss, S., Krüger, T. and Troubetzkoy, S.</i> Topological and symbolic dynamics for hyperbolic systems with holes	1305
de Melo, W., Salomão, P. A. S. and Vargas, E. A full family of multimodal maps on the circle	1325
<i>González-Tokman, C., Hunt, B. R. and Wright, P.</i> Approximating invariant densities of metastable systems	1345
<i>Gupta, C., Holland, M. and Nicol, M.</i> Extreme value theory and return time statistics for dispersing billiard maps and flows, Lozi maps and Lorenz-like maps	1363
Hazard, P. E. Hénon-like maps with arbitrary stationary combinatorics	1391
Kamae, T. Uniform sets and super-stationary sets over general alphabets	1445
Kamae, T. and Salimov, P. V. On maximal pattern complexity of some automatic words	1463
<i>Kunze, M. and Ortega, R.</i> Complete orbits for twist maps on the plane: the case of small twist	1471
Mihailescu, E. On a class of stable conditional measures	1499
Mora, L. and Ruiz, B. Diffeomorphisms with infinitely many irrational invariant curves	1517
Yang, J. Newhouse phenomenon and homoclinic classes	1537
<i>Yayama, Y.</i> Existence of a measurable saturated compensation function between subshifts and its applications	1563
Papers to appear in forthcoming issues	1591

**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<sup>®</sup> C018127

