

## Index to Volume 4

- AARONSON, J. AND SULLIVAN, D. Rational ergodicity of geodesic flows, 165
- ADLER, R. L. AND FLATTO, L. The backward continued fraction map and geodesic flow, 487
- ALEXANDER, J. C. AND YORKE, J. A. Fat baker's transformations, 1
- AUSLANDER, J., MCMAHON, D. C., VAN DER WOUDE, J. C. S. P. AND WU, T.-S. Weak disjointness and the equicontinuous structure relation, 323
- BAMON, R., MALTA, I. P., PACIFICO, M. J. AND TAKENS, F. Rotation intervals of endomorphisms of the circle, 493
- BEREND, D. Minimal sets on tori, 499
- BEREND, D. AND BERGELSON, V. Ergodic and mixing sequences of transformations, 353
- BERGELSON, V. *See* BEREND, D. AND BERGELSON, V.
- BERNHARDT, C. Simple permutations with order a power of two, 179
- BOYLE, M. Shift equivalence and the Jordan form away from zero, 367
- BROER, H. W. AND VEGTER, G. Subordinate Šil'nikov bifurcations near some singularities of vector fields having low codimension, 509
- CORNELIS, E. AND WOJTKOWSKI, M. A criterion for the positivity of the Liapunov characteristic, 527
- DANI, S. G. On orbits of unipotent flows on homogeneous spaces, 25
- DENKER, M. AND PHILIPP, W. Approximation by Brownian motion for Gibbs measures and flows under a function, 541
- DEVANEY, R. L. AND KRYCH, M. Dynamics of  $\exp(z)$ , 35
- DUISTERMAAT, J. J. Non-integrability of the 1:1:2 resonance, 553
- ELLIOTT, G. A. AND ZSIDÓ, L. One-parameter automorphism groups of operator algebras allowing spectral projections, 187
- FATHI, A. Skew products and minimal dynamical systems on separable Hilbert manifolds, 213
- FIEBIG, U. R. A return time invariant for finitary isomorphisms, 225
- FIELDSTEEL, A. Stability of the weak Pinsker property for flows, 381
- FLATTO, L. *See* ADLER, R. L. AND FLATTO, L.
- FRANKS, J. Flow equivalence of subshifts of finite type, 53
- GHYS, E. Flots d'Anosov sur les 3-variétés en cercles, 67
- GLASNER, S. AND RUDOLPH, D. Uncountably many topological models for ergodic transformations, 233
- GUTKIN, E. Billiards on almost integrable polyhedral surfaces, 569
- HALL, G. R. A topological version of a theorem of Mather on twist maps, 585
- HURLEY, M. Combined structural and topological stability are equivalent to Axiom A and the strong transversality condition, 81
- DEL JUNCO, A. AND RUDOLPH, D. J. Kakutani equivalence of ergodic  $\mathbb{Z}^n$  actions, 89
- KALIKOW, S. A. Twofold mixing implies threefold mixing for rank one transformations, 237
- KAPLAN, J. L., MALLET-PARET, J. AND YORKE, J. A. The Lyapunov dimension of a nowhere differentiable attracting torus, 261
- KRYCH, M. *See* DEVANEY, R. L. AND KRYCH, M.
- LIND, D. A. The entropies of topological Markov shifts and a related class of algebraic integers, 283

# *Ergodic theory and dynamical systems*

## EDITORS

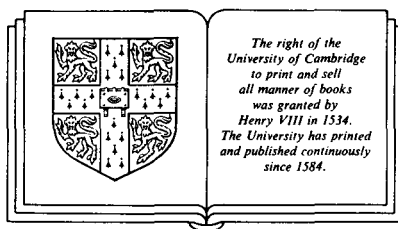
Michel Herman   Anatole Katok   Klaus Schmidt   Peter Walters

## EDITORIAL BOARD

- |  |   |
|--|---|
| C. C. Conley (University of Wisconsin)   | J. N. Mather (Princeton University)                               |
| A. Connes (IHES)                         | M. Misiurewicz (Warsaw University)                                |
| R. L. Dobrushin (USSR Acad. of Sciences) | S. E. Newhouse (University of North Carolina)                     |
| D. B. A. Epstein (University of Warwick) | D. S. Ornstein (Stanford University)                              |
| J. Feldman (University of California)    | J. Palis (IMPA)   |
| J. Franks (Northwestern University)      | W. Parry (University of Warwick)                                  |
| H. Furstenberg (Hebrew University)       | D. Ruelle (IHES)  |
| K. Jacobs (University of Erlangen)       | Ya. G. Sinai (L. D. Landau Inst. for Theoretical Physics, Moscow) |
| H. Kesten (Cornell University)           | S. Smale (University of California)                               |
| U. Krengel (University of Göttingen)     | J. P. Thouvenot (University of Paris 6)                           |
| W. Krieger (University of Heidelberg)    | W. A. Veech (Rice University)                                     |
| G. A. Margulis (USSR Acad. of Sciences)  | B. Weiss (Hebrew University)                                      |
|  | R. Zimmer (University of Chicago)                                 |

VOLUME 4

1984



CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE

LONDON    NEW YORK    NEW ROCHELLE  
MELBOURNE    SYDNEY

- MCMAHON, D. C. *See* AUSLANDER, J., MCMAHON, D. C., VAN DER WOUDE, J. C. S. P. AND WU, T.-S.
- MALLET-PARET, J. *See* KAPLAN, J. L., MALLET-PARET, J. AND YORKE, J. A.
- MALTA, I. P. *See* BAMON, R., MALTA, I. P., PACIFICO, M. J. AND TAKENS, F.
- MATHER, J. N. Non-existence of invariant circles, 301
- MISIUREWICZ, M. Twist sets for maps of the circle, 391
- ORNSTEIN, D. AND WEISS, B. Any flow is an orbit factor of any flow, 105
- PACIFICO, M. J. *See* BAMON, R., MALTA, I. P., PACIFICO, M. J. AND TAKENS, F.
- PARRY, W. Bowen's equidistribution theory and the Dirichlet density theorem, 117
- PESIN, YA. B. On the notion of the dimension with respect to a dynamical system, 405
- PHILIPP, W. *See* DENKER, M. AND PHILIPP, W.
- POLLICOTT, M. A complex Ruelle-Perron-Frobenius theorem and two counterexamples, 135
- REES, M. Ergodic rational maps with dense critical point forward orbit, 311
- ROBBIN, J. W. Unfoldings of discrete dynamical systems, 421
- ROBINSON, C. Transitivity and invariant measures for the geometric model of the Lorenz equations, 605
- RUDOLPH, D. J. *See* GLASNER, S. AND RUDOLPH, D.
- RUDOLPH, D. J. *See* DEL JUNCO, A. AND RUDOLPH, D. J.
- SULLIVAN, D. *See* AARONSON, J. AND SULLIVAN, D.
- SZEWC, B. The Perron-Frobenius operator in spaces of smooth functions on an interval, 613
- TAKENS, F. *See* BAMON, R., MALTA, I. P., PACIFICO, M. J. AND TAKENS, F.
- VEGTER, G. *See* BROER, H. W. AND VEGTER, G.
- WEISS, B. *See* ORNSTEIN, D. AND WEISS, B.
- WILLIAMS, R. F. Lorenz knots are prime, 147
- WOJTKOWSKI, M. *See* CORNELIS, E. AND WOJTKOWSKI, M.
- VAN DER WOUDE, J. C. S. P. *See* AUSLANDER, J., MCMAHON, D. C., VAN DER WOUDE, J. C. S. P. AND WU, T.-S.
- WU, T.-S. *See* AUSLANDER, J., MCMAHON, D. C., VAN DER WOUDE, J. C. S. P. AND WU, T.-S.
- YORKE, J. A. *See* ALEXANDER, J. C. AND YORKE, J. A.
- YORKE, J. A. *See* KAPLAN, J. L., MALLET-PARET, J. AND YORKE, J. A.
- ZSIDÓ, L. *See* ELLIOTT, G. A. AND ZSIDÓ, L.