Contents

J. Aaronson and B. Weiss
A $\mathbb{Z}^d$ Ergodic Theorem with Large Normalising Constants 1

M. A. Akcoglu, J. R. Baxter, and S. E. Ferrando
A Repeated Filling Scheme for Upcrossings 15

E. Akin, J. Auslander, and K. Berg
When is a Transitive Map Chaotic? 25

M. Atlagh et M. Weber
Une Nouvelle Loi Forte des Grands Nombres 41

J. R. Baxter and N. C. Jain
An Approximation Condition for Large Deviations and Some Applications 63

V. Bergelson and I. J. Håland
Sets of Recurrence and Generalized Polynomials 91

N. H. Bingham
The Strong Arc-Sine Law in Higher Dimensions 111

M. Boshernitzan, R. L. Jones, and M. Wierdl
Integer and Fractional Parts of Good Averaging Sequences in Ergodic Theory 117

R. E. Bradley
The Uniqueness of Induced Operators 133

N. Etemadi
On Convergence of Partial Sums of Independent Random Variables 137

R. A. Fefferman
Harmonic Analysis of Operators Associated with a Multiparameter Group of Dilations 145

S. R. Foguel
Markov Matrices 157

N. E. Frangos and P. Imkeller
Existence and Continuity of the Quadratic Variation of Strong Martingales 179

C. D. Fuh and T. L. Lai
Convergence Rate in the Strong Law of Large Numbers for Markov Chains 185

H. Furstenberg and B. Weiss
A Mean Ergodic Theorem for $\frac{1}{N}\sum_{n=1}^{N} f(T^n x)g(T^{n^2}x)$ 193

R. L. Jones and M. Wierdl
Convergence of Ergodic Averages 229

M. Lacey
Bourgain's Entropy Criteria 249

S. P. Lalley
Self-Intersections of Closed Geodesics on a Negatively Curved Surface: Statistical Regularities 263

D. Li and M. B. Rao
A Note on the Law of the Iterated Logarithm for Weighted Sums of Independent Identically Distributed Random Variables 273

M. Lin and J. Olsen
Besicovitch Functions and Weighted Ergodic Theorems for LCA Group Actions 277

V. Losert
A Remark on the Strong Sweeping Out Property 291

D. Maharam
Ergodic Invertible Liftings 295

G. Peškir and M. Weber
The Uniform Ergodic Theorem for Dynamical Systems 305

M. A. Pinsky
Pointwise Fourier Inversion and Related Jacobi Polynomial Expansions 333

P. Révész
The Distribution of the Particles of a Branching Random Walk 345

B.-Z. Rubshtein
On a Random Ergodic Theorem for Bistochastic Operators 365

B.-Z. Rubshtein
A Central Limit Theorem for Conditional Distributions 373

Y. Sagher and N. Xiang
Complex Methods in the Calculation of Some Distribution Functions 381

Y. Sagher and K. Zhou
Exponential Integrability of Rademacher Series 389

D. Schneider and M. Weber
Weighted Averages of Contractions Along Subsequences 397

Y. Sun
On Uniform Distribution of Sequences 405

R. Wittmann
Ergodic Theorems for Exit Laws 421

Q. Zhang
On Skew Products of Irrational Rotations with Tori 435