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INTRODUCTION

This volume contains original results or survey articles presented at the "Journées Ergodiques" in Rennes during the years 1973 and 1974. The subject matter is ergodic theory in a broad sense, varying from strong laws of large numbers in Banach spaces to uniform distribution to questions touching statistical mechanics.

A list of the lectures given at each of the meetings is included. The meetings were held at the Probability Laboratory of the University of Rennes, in Brittany. Financial support was provided by the following organisms :

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Société Mathématique de France.

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March 1975

Rennes

Jean-Pierre CONZE

Michael KEANE

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- A. AVEZ *Croissance des groupes de type fini et fonctions harmoniques*
- A. BECK *The paradox of the hare and the tortoise*
- A. BECK *A counter-example to the strong law of large numbers for weakly orthogonal random variables*
- A. BRUNEL *Sommes d'itérés d'opérateurs positifs*
- A. CONNES *Problèmes ergodiques liés à la classification des facteurs*
- JP. CONZE *Actions minimales sur les espaces homogènes*
- P. CREPEL *Récurrence des marches aléatoires*
- M. DENKER *Transformation associated with an unitary operator*
- HO. GEORGII *K-systems and weak Bernoullicity in statistical mechanics*
- C. GRILLENBERGER *Ensembles minimaux non strictement ergodiques*
- A. GUICHARDET *Théorie de l'intégration non commutative*
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- K. JACOBS *Résultats récents en théorie ergodique*
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- W. KRIEGER *Ergodic dynamical systems with a quasi-invariant measure and uncountably many eigenvalues*
- F. LEDRAPPIER *Mesures d'équilibre sur un réseau*

- A. MARTIN-LOF *Density fluctuations in a gas of non-interacting particles, a central limit theorem for random fields on \mathcal{G}'*
- Y. MEYER *Produits de Riesz et schémas de Bernoulli*
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- O. de PAZZIS *Les systèmes dynamiques et la mécanique statistique classique*
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- D. REVUZ *Théorie du potentiel pour les marches étagées récurrentes*
- B. ROYNETTE *Comportement à l'infini du potentiel pour les marches aléatoires sur les déplacements de \mathbb{R}^n*
- P. SHIELDS *Skew products of Bernoulli shifts with rotations*
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- M. SUEUR *Théorème de renouvellement sur les groupes nilpotents*
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- JP. THOUVENOT *Problèmes de décomposition de systèmes dynamiques*
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