

RIMS Project Research
The international conference
**Functions in Number Theory
and
Their Probabilistic Aspects**

Organizers S. Akiyama, K. Fukuyama, K. Matsumoto, H. Nakada,
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Place Room 420, Research Institute for Mathematical Sciences, Kyoto University
Dates December 13–17, 2010

PROGRAM

December 13

- 10:00–10:50 J.-P. Allouche
Inconstancy of finite and infinite sequences
- 11:00–11:50 Y. Takahashi
Unitary matrices and probability
- 13:30–14:20 P. D. T. A. Elliott
Operator norms and the mean-values of multiplicative functions
- 14:30–15:20 E. Manstavičius
Probabilistic number theory on permutations
- 15:50–16:20 Y. Tachiya
Linear relations between pattern sequences in a $\langle q, r \rangle$ -numeration system
- 16:30–17:00 H. Ei
On Rauzy fractals generated by some automorphisms

December 14

- 10:00–10:50 V. Bergelson
Ramsey theory in the multiplicative integers and Diophantine approximations
- 11:00–11:50 A. Hora
Characters and harmonic functions related to infinite wreath product groups
- 13:30–14:20 R. F. Tichy
Recent developments in discrepancy theory
- 14:30–15:20 J. Lagarias
The Takagi function and related functions
- 15:50–16:40 Y. Okabe
Hamiltonian associated with stationary process having T -positivity
and Riemann hypothesis

16:50–17:20 H. Kaneko
On the fractional parts of powers of algebraic numbers

December 15

10:00–11:00 E. Lindenstrauss
On Linnik type problems

11:10–12:10 H. Furstenberg
Diophantine Equations and WM (weakly mixing) Sets

December 16

10:00–10:50 T. Shirai
Determinantal point processes and the zeros of analytic functions

11:00–11:50 Y. Ihara
An analytic function in 3 complex variables related to the value-distribution of $\log L$,
and the “Plancherel volume”

13:30–14:20 A. Laurinćikas
Universality of the Riemann zeta-function

14:30–15:20 J. Steuding
Discrete moments of the Riemann zeta-function on deterministic and random sequences

15:50–16:20 H. Nagoshi
Independence of L -functions

16:30–17:00 L. Pańkowski
Hybrid universality for L -functions without the Euler product

December 17

10:00–10:50 R. Garunkštis
Universality of the Selberg zeta-function for the modular group

11:00–11:50 T. Tate
Asymptotic Euler-Maclaurin formula over lattice polytopes

13:30–14:00 S. Yasutomi
Some aspects of a multicontinued fraction algorithm

14:10–14:40 R. Natsui
Euclidean algorithm over $\mathbb{F}_q[X]$ and its cost functions

15:10–15:40 H. Mishou
The joint universal property for derivatives of the Riemann zeta function

15:50–16:20 Y. Lee
The universality theorem for Hecke L -functions

16:30–17:00 T. Nakamura
The generalized strong recurrence and the Riemann hypothesis