

Workshop “Number Theory and Ergodic Theory”

Period: Feb. 10 – 12, 2024

Venue: Kanazawa University Satellite Plaza

-Address: 16 NISHICHO3BANCHO, KANAZAWA, ISHIKAWA, 920-0913, JAPAN

-Tel: 076-232-5343 (+81-76-232-5343),

-URL: http://www.adm.kanazawa-u.ac.jp/ad_koho/satellite/map/map.html

Room: Cultural exchange salon on the 1st floor

Organizers: Hiroshi Fujisaki (Kanazawa University)

Hajime Kaneko (University of Tsukuba)

Shin-ichi Yasutomi (Toho University)

Hisatoshi Yuasa (Osaka Kyoiku University)

*Please take your trash to home with you. Thank you for your cooperation.

Program

Saturday, February 10

9:00 – 9:20 Hiroshi Fujisaki (Kanazawa University)

On topological entropies of the subshifts associated with the stream version of asymmetric binary systems

9:40 – 10:30 Hajime Kaneko (University of Tsukuba)

Analogue of Markoff and Lagrange spectra on one-sided shift spaces

10:50 – 11:40 Yasushi Nagai (Shinshu University)

Overlap algorithm for general S-adic tilings

11:40 – 13:40 Lunch Break

13:40 – 14:30 Hideki Tsuiki (Kyoto University)

TriMata and Tiling

14:50 – 15:40 Tadahisa Hamada (University of Tsukuba)

Transition process of factor graphs of Sturmian words

16:00 – 16:50 Teturo Kamae (Osaka Metropolitan University)

Infinite self-shuffling words

Sunday, February 11

- 9:00 – 9:30 Yohei Tachiya (Hirosaki University)
Linear independence of infinite series related to the Thue-Morse sequence along powers
- 9:50 – 10:40 Masamichi Yoshida (Osaka Metropolitan University)
Signed Expansion and associated Odometer based on Cubic Pisot Unit
(Joint work with Fumichika Takamizo)
- 11:00 – 11:40 Nathaniel Nollen (University of the Philippines-Diliman)
Number of Nonzero Digits in Quaternion Expansions
- 11:40 – 13:40 Lunch Break**
- 13:40 – 14:00 Asaki Saito (Future University Hakodate)
Exact binary expansion of real algebraic integers using Newton's method
- 14:20 – 14:40 Mako Toyosumi (Japan Women's University)
Some complex continued fractions with coefficients in a submodule
- 15:00 – 15:50 Dong Han Kim (Dongguk University - Seoul)
Continued fraction algorithm for rational numbers of certain parity types
- 16:10 – 17:00 Shin-ichi Yasutomi (Toho University)
Simultaneous convergent continued fraction algorithm with two places and the potential of ergodicity

Monday, February 12

- 9:00 – 9:50 Haruyoshi Tanaka (Naruto University of Education)
Higher-order asymptotic behaviours of pressure functionals and statistical representations of the coefficients
- 10:10 – 10:40 Soonki Hong (Postech)
Weak Ramanujan property of standard non-uniform arithmetic quotient for PGL_3 and PGL_4
- 11:00 – 11:50 Kota Saito (University of Tsukuba)
The simple normality of the square root of two and the Riemann zeta function
- 12:00 – 18:00 free-form discussion (at Lecture Room on the 2nd floor)

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