

Japan-Korea Workshop on Number Theory and Ergodic Theory

Organizers : Shigeki Akiyama (Niigata), Hitoshi Nakada (Keio)

PLACE RIMS, Room 111

DATES July 26 – 30, 2010

AIM This workshop is organized as a part of RIMS Project Research 2010 “Functions in Number Theory and Their Probabilistic Aspects”. The aim of this workshop is to encourage the collaboration among Chinese, Korean and Japanese mathematicians who are working on arithmetics and dynamics.

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The sessions “Discussion I” are planned for subjects related to the morning talks. The sessions “Discussion II” are rather free and any suggestion for them are welcome.

PROGRAM

July 26

- 10:00–11:00 Dong Han Kim (Dongguk University)
Metric inhomogeneous diophantine approximation on the field of formal Laurent series
- 11:15–12:15 Shigeki Akiyama(Niigata University)
Pisot conjecture and finite cocycles
- 13:30–15:00
Discussions I
- 15:30–17:00
Discussions II

July 27

- 9:30–10:30 Rie Natsui (Japan Women’s University)
Euclidean algorithm over $\mathbb{F}_q[X]$
- 10:45–11:45 Jeong Yup Lee (KIAS)
Discrete spectrum and the Meyer property on substitution point sets
- 13:30–15:00
Discussions I
- 15:30–17:00
Discussions II

July 28

9:30–10:30 Hitoshi Nakada (Keio University)
On the dynamics of fully subtractive algorithm

10:45–11:45
Discussions I

13:30–15:00 Hajime Kaneko (Kyoto University)
On the fractional parts of geometric progressions

15:30–17:00
Discussions II

July 29

9:30–10:30 Bo Tan (Huazhong University of Science and Technology)
Sturmian sequences and invertible substitutions

10:45–11:45 Shunji Ito (Kanazawa University)
On substitutions related to the Rauzy induction of 4-interval exchange transformations

13:30–15:00
Discussions I

15:30–17:00
Discussions II

July 30

9:30–10:30 DoYong Kwon (Chonnam National University)
Reciprocal polynomials having zeros on the unit circle, and application to Pisot and Salem numbers

10:45–11:45 Hiromi Ei (Hirosaki University)
Tilings and atomic surfaces generated by automorphisms related to some quadratic polynomials

13:30–15:00
Discussions I

15:30–17:00
Discussions II