Analytic Number Theory and Related Topics*

Date: October 12 (Tue) 10:00 - October 15 (Fri) 16:50, 2021

Place: Online via Zoom

Organizers: Hirotaka Akatsuka (Otaru University of Commerce)

Yoshinori Yamasaki (Ehime University)



Program

October 12 (Tue)

- 10:00 10:10 Opening
- 10:10 10:40 **Genki Shibukawa** (Kobe University)

Artin-style characterizations for multiple gamma and sine functions

11:00 – 11:30 Masato Kobayashi (Kanagawa University)

Three new integral representations for Apery constant (joint work with Shunji Sasaki)

13:30 – 14:20 **Takao Komatsu** (Zhejiang Sci-Tech University)

Bernoulli and Cauchy numbers with level 2 associated with Stirling numbers with level 2

14:40 – 15:30 **Takumi Noda** (Nihon University)

Asymptotics for Dirichlet-Hurwitz-Lerch type Eisenstein series and applications (joint work with Masanori Katsurada)

Seiji Kuga (Kyushu University) 15:50 - 16:40

A resolvent trace formula of Jacquet-Zagier type for Hilbert Maass forms

October 13 (Wed)

9:40 – 10:30 **Takashi Nakamura** (Tokyo University of Science)

Rapidly convergent series representations of symmetric Tornheim double zeta functions

Toshiki Matsusaka (Nagoya University) 10:50 - 11:40

Stephan's observation on the central binomial series

(joint work with Beáta Bényi)

13:30 - 14:20Wataru Takeda (Tokyo University of Science)

Pieri type formula for the Schur multiple zeta functions

(joint work with Maki Nakasuji)

14:40 – 15:30 Kota Saito (Nagoya University)

Prime-representing functions and Hausdorff dimensions

15:50 – 16:40 Ade Irma Suriajaya (Kyushu University)

The average number of Goldbach representations, pair correlation of zeros of the Riemann zeta function and error term of the prime number theorem (joint work with Daniel A. Goldston)

^{*} This workshop is partially supported by RIMS and JSPS KAKENHI Grant Number 19K03392.

October 14 (Thu)

- 9:40 10:30 **Hirotaka Kobayashi** (Nagoya University)
 - On the discrete mean of the higher derivative of Hardy's Z-function
- 10:50 11:40 **Kenta Endo** (Nagoya University)

Generalization of the effectively refined multi-dimensional denseness theorem to the Selberg class

13:30 – 14:20 Masahiro Mine (Sophia University)

Extreme value distributions for iterated integrals of the logarithm of the Riemann zeta-function

(joint work with Kenta Endo and Shōta Inoue)

14:40 – 15:30 Shōta Inoue (Tokyo Institute of Technology)

Joint value distribution for L-functions on the critical line (joint work with Junxian Li)

15:50 – 16:20 Kazuma Sakurai (Nagoya University)

On the zeros of the k-th derivative of the Dirichlet L-functions under the generalized Riemann hypothesis

October 15 (Fri)

9:40 – 10:30 Masatoshi Suzuki (Tokyo Institute of Technology)

On canonical systems related to the Schur-Cohn test

10:50 – 11:40 Makoto Kawashima (Nihon University)

Holonomic series and orthogonal polynomials

13:30 – 14:20 **Hajime Kaneko** (University of Tsukuba)

On the sum of digits in the binary expansion of the products of integers (joint work with Thomas Stoll)

14:40 – 15:30 **Takafumi Miyazaki** (Gunma University)

Number of solutions to some purely exponential Diophantine equation in three unknowns

(joint work with István Pink)

15:50 – 16:40 **Taka-aki Tanaka** (Keio University)

On power series generated by simpler sequences and having strong algebraic independence properties

(joint work with Haruki Ide and Kento Toyama)

16:40 - 16:50 Closing