

RIMS conference "Analytic and arithmetic aspects of automorphic representations"

Organizers: Tadashi Miyazaki (Kitasato University) Hiroki Aoki (Tokyo University of Science)

Date: January 23rd (Mon.) P.M. - January 27th (Fri.) A.M. 2023

Venue: Room 420, Research Institute for Mathematical Sciences (RIMS), Kyoto University, Kyoto 606-8502, Japan + Zoom (hybrid)

Jan. 23 (Mon.)

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

Arithmetic approach to *p*-numerical semigroups

14:40 – 15:40 Koji Tasaka (Aichi Prefectural University)

Spherical designs and modular forms of the D_4 root lattice

16:00 – 17:00 Kohta Gejima^{*} (Osaka Metropolitan University)

Determining cusp forms by critical values of Rankin-Selberg L-functions

Jan. 24 (Tue.)

- 9:20 10:20 (EST 19:20 20:20, Jan. 23 (Mon.)) Peter Humphries^{*} (University of Virginia) Newform Theory
- 10:40 11:40 Eric Stade (University of Colorado Boulder)

An asymptotic orthogonality relation for $GL(n, \mathbb{R})$ and recurrence relations for Mellin transforms of $GL(n, \mathbb{R})$ Whittaker functions

13:20 – 14:20 Kenichi Namikawa (Tokyo Denki University)

An integrality of critical values of Rankin-Selberg L-functions for $GL(n) \times GL(n-1)$

14:40 – 15:40 Kazuki Morimoto (Kobe University)

On Ichino-Ikeda type formula of Bessel periods for (U(2n), U(1)) and (GL(2n), GL(1))

15:40 – 16:00 On the RIMS workshop next academic year. (Japanese Only)

^{*}Talk given by online via Zoom

Jan. 25 (Wed.)

9:20 – 10:20 Yugo Takanashi (University of Tokyo)

Parity of conjugate self-dual representations of inner forms of GL_n over p-adic fields

10:40 – 11:40 Shuji Horinaga (Nippon telegraph and telephone corporation)

Cuspidal components of Siegel modular forms for large discrete series representations of $\mathrm{Sp}_4(\mathbb{R})$

13:20 – 14:20 Takuya Yamauchi (Tohoku University)

Equidistribution theorems for holomorphic Siegel cusp forms of general degree: the level aspect

14:40 – 15:40 Kazunari Sugiyama (Chiba Institute of Technology)

The modularity of Siegel's zeta functions

16:00 – 17:00 Masao Tsuzuki (Sophia University)

A relative trace formula on GL(n) and its application

Jan. 26 (Thu.)

9:20 – 10:20 Shingo Sugiyama (Nihon University)

Resolvent trace formulas of Hecke operators and optimal estimates of the Hurwitz class numbers

10:40 – 11:40 Yoshinori Mizuno (Tokushima University)

On Hutchinson's conjecture

13:20 – 14:20 Shotaro Kimura (Waseda University)

On constructions of modular differential equations

14:40 – 15:40 Siegfried Böcherer (University of Mannheim)

On equivariant holomorphic differential operators starting from vector-valued cases

Jan. 27 (Fri.)

9:20 – 10:20 Keiichi Gunji (Chiba Institute of Technology)

Simple functional equations satisfied by Siegel Eisenstein series of level p

10:40 – 11:40 Tomoyoshi Ibukiyama (Osaka University)

Differential operators on Siegel modular forms and Laplace transform