



RIMS conference “Research on automorphic forms”

Organizers: Hiroki Aoki (Tokyo University of Science)
Kenichi Namikawa (Tokyo Denki University)

Date: January 22rd (Mon.) P.M. – January 26th (Fri.) A.M. 2024

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

Jan. 22 (Mon.)

12:45 – 13:45 **Riku Higa** (Tokyo University of Science)

Galois trace forms of type A_n , D_n , E_n for odd n and codes

13:45 – 14:45 **Yiyang Wang** (Kyoto University)

Formal degrees and parabolic induction: the maximal case

15:00 – 16:00 **Yohei Saito** (Keio University)

Theta lift to certain cohomological representations of indefinite orthogonal groups

16:00 – 17:00 **Kazuma Ohara** (The University of Tokyo)

Types for Bernstein blocks and their Hecke algebras

Jan. 23 (Tue.)

9:30 – 10:30 **Florian Ito/Sprung** (Arizona State University)

On relationships between Bloch–Kato Selmer groups and signed Selmer groups

10:45 – 11:45 **Atsushi Murase** (Kyoto Sangyo University)
and **Hiro-aki Narita** (Waseda University)

On Arakawa lifting

13:15 – 14:15 **Nils-Peter Skoruppa** (University of Siegen)

Dessins d'enfants, network flows and modular forms

14:30 – 15:30 **Siegfried Böcherer** (University of Mannheim)

p -adic limits of Siegel Eisenstein series (joint work with T. Kikuta)

15:45 – 16:45 **Yasutaka Ihara** (Kyoto University)

On Mikio Sato's works related to automorphic forms – history and later developments –

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Jan. 24 (Wed.)

9:30 – 10:30 **Yuya Murakami** (Kyushu University)

Various quantum invariants and radial limits of false theta functions

10:45 – 11:45 **Brandon Williams** (RWTH Aachen)

Modular forms with poles on hyperplane arrangements

13:15 – 14:15 **Takuya Yamauchi** (Tohoku University)

Isogeny graphs on superspecial abelian varieties: Eigenvalues, Connection to Bruhat–Tits buildings, and Property (T)

14:30 – 15:30 **Tomoyoshi Ibukiyama** (Osaka University)

Dimensions of paramodular forms with involution

15:45 – 16:45 **Hiro-aki Narita** (Waseda University)

Fourier-Jacobi expansion of cusp forms generating quaternionic discrete series

16:45 – 17:00 **On the RIMS workshop next academic year**

18:00 – **Conference Dinner**

Jan. 25 (Thu.)

9:30 – 10:30 **Nozomi Ito** (National Taiwan University)

On the formula of the norms of Miyawaki lifts

10:45 – 11:45 **Satoshi Wakatsuki** (Kanazawa University)

Asymptotic behavior for twisted traces of self-dual and conjugate self-dual representations of GL_n

13:15 – 14:15 **Chen Wan** (Rutgers University)

A local twisted trace formula for Whittaker induction of coregular symmetric pairs

14:30 – 15:30 **Takao Komatsu** (Zhejiang Sci-Tech University)

Diophantine problems of the equations $x^2 - y^2 = z^r$

Jan. 26 (Fri.)

9:30 – 10:30 **Hisashi Kojima** (Saitama University)

On the representability of Hilbert cusp forms by theta series

10:45 – 11:45 **Haigang Zhou** (Tongji University)

The classification and representations of positive definite ternary quadratic forms of level $4N$