



RIMS Workshop

Research on Finite Groups and Their Representations, Vertex Operator Algebras, and Algebraic Combinatorics

Organizer : Hajime Tanaka (Tohoku University)

Date : December 16 (Tue) – 19 (Fri)

Venue : Room 111, Research Institute for Mathematical Sciences, Kyoto University

Program

December 16 (Tue)

- 9:40–10:40** Hokuto Idei (Yamagata University), Fumihito Oda (Kinki University)
The generalized Burnside ring and the character ring of the symmetric group
- 10:50–11:50** Hiroki Shimakura (Tohoku University)
On orbifold constructions of holomorphic vertex operator algebras of central charge 24 associated to inner automorphisms
- 13:20–14:20** Toshiyuki Abe (Ehime University)
On the classification of irreducible modules for the VOA $\text{Com}_{(L_{\widehat{sl}_2}(1,0)^{\otimes 4})^\tau}(L_{\widehat{sl}_2}(4,0))$
- 14:30–15:30** Scott Carnahan (University of Tsukuba)
Dong-Li-Mason plus Weil
- 15:40–16:40** Masahiko Miyamoto (University of Tsukuba)
The simple modules of commutant subVOAs

December 17 (Wed)

- 9:40–10:40** Hiroki Aoki (Tokyo University of Science)
On Jacobi forms which connect infinite products and infinite sums
- 10:50–11:50** Tsuyoshi Miezaki (Yamagata University)
Eisenstein series and E-polynomials
- 13:20–14:20** Yumiko Hironaka (Waseda University)
Zeta functions of finite groups by enumerating subgroups
- 14:30–15:30** Motohiro Ishii (Tohoku University)
Path and gallery models for level-zero representations of quantum affine algebras

- 15:40–16:10** Tomonori Hashikawa (Tohoku University)
Classification of V_L^+ of class \mathcal{S}^4
- 16:20–16:50** Yuta Watanabe (Tohoku University)
The Terwilliger algebras of the Grassmann graphs

December 18 (Thu)

- 9:40–10:40** Hiro-Fumi Yamada (Okayama University)
Regular character table of a symmetric group
- 10:50–11:50** Jae-Ho Lee (Tohoku University)
Nonsymmetric Askey-Wilson polynomials and Q -polynomial distance-regular graphs
- 13:20–14:20** Yutaka Hiramane (Kumamoto University)
On SCT automorphism groups of divisible designs
- 14:30–15:30** Takayuki Okuda (Hiroshima University)
A relative upper bound for equiangular lines from Bachoc–Vallentin’s SDP method
- 15:40–16:40** Sho Suda (Aichi University of Education)
Mutually unbiased weighing matrices and a two-fold cover of strongly regular graphs with spreads

December 19 (Fri)

- 9:40–10:40** Koji Momihara (Kumamoto University)
Three-valued Gauss periods and related designs and association schemes
- 10:50–11:50** Gary Greaves (Tohoku University)
Graphs with precisely three distinct eigenvalues
- 13:20–14:20** Mohammad Farrokhi D. G. (Muroran Institute of Technology)
On the probability that a group satisfies a law
- 14:30–15:30** Hiroki Sasaki (Shinshu University)
Block ideals and cohomology rings of finite groups