



RIMS Workshop

Cohomology Theory of Finite Groups and Related Topics

Organizers: Akihiko Hida (Saitama University)
Masaki Kameko (Shibaura Institute of Technology)

February 18-20, 2015

Research Institute for Mathematical Sciences, Kyoto University, JAPAN

Program

Wednesday, February 18

- 13:00-13:50 Yutaka Yoshii (National Institute of Technology, Nara College)
A direct sum decomposition of the $kG(p^r)$ -submodule generated by the
highest weight vector of a certain Weyl G -module
- 14:00-14:50 Jacques Thévenaz (École polytechnique fédérale de Lausanne)
The algebra of essential relations on a finite set
- 15:10-16:00 Daiki Obara (Tokyo University of Science)
Hochschild cohomology ring modulo nilpotence of finite dimensional
algebras
- 16:10-16:40 Mayu Tsukamoto (Osaka City University))
Hochschild cohomology of q -Schur algebras

Thursday, February 19

- 9:20-9:50 Ayako Itaba (Tokyo University of Science)
On the decomposition of the Hochschild cohomology group of a monomial
algebra satisfying a separability condition
- 10:00-10:50 Toshiyuki Akita (Hokkaido University)
Vanishing theorems for the homology of Coxeter groups and their
alternating subgroups
- 11:00-11:50 Serge Bouc (LAMFA-CNRS, Université de Picardie-Jules Verne)
Correspondence functors

- 13:30-14:00 Tomohiro Itagaki (Tokyo University of Science)
Notes on the Hochschild homology dimension and truncated cycles
- 14:10-15:00 Jacques Thévenaz (École polytechnique fédérale de Lausanne)
Torsion endo-trivial modules
- 15:20-15:50 Masaki Kameko (Shibaura Institute of Technology)
On the cycle map of a finite group
- 16:00-16:30 Nobuaki Yagita (Ibaraki University)
The splitting of cohomology of p -groups with p -rank 2

Friday, February 20

- 9:10-9:40 Hiroki Ishioka (Tokyo University of Science)
Saturated fusion systems and Brauer indecomposability of Scott modules
- 9:50-10:30 Hiroki Sasaki (Shinshu University)
Module structure of source algebras and cohomology of block algebras
- 10:40-11:10 Tetsuro Okuyama (Hokkaido University of Education)
Remarks on the cuspidal simple module of $GL(p, q)$ over a field of characteristic p with $p|q - 1$
- 11:20-12:10 Serge Bouc (LAMFA-CNRS, Université de Picardie-Jules Verne)
Extensions of simple cohomological Mackey functors
- 13:30-14:00 Masato Sawabe (Chiba University)
Subgroup complexes of nilpotent subgroups
- 14:10-14:40 Masao Kiyota (Tokyo Medical and Dental University)
On Cartan matrices determined by the dimensions of simple modules
- 15:00-15:30 Tomoyuki Wada (Tokyo University of Agriculture and Technology)
Numbers of irreducible Brauer characters of height 0 in 2-blocks of finite groups
- 15:40-16:30 Atumi Watanabe (Kumamoto University)
On the work of Masafumi Murai