

Proceedings of the 48th Symposium on Ring Theory and Representation Theory

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Edited by
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University of Hyogo

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Organizing Committee of The Symposium on Ring Theory and Representation Theory

The Symposium on Ring Theory and Representation Theory has been held annually in Japan and the Proceedings have been published by the organizing committee. The first Symposium was organized in 1968 by H. Tominaga, H. Tachikawa, M. Harada and S. Endo. After their retirement a new committee has been set up in 1997 to manage the Symposium, and its committee members are listed in the web page

<http://fuji.cec.yamanashi.ac.jp/~ring/h-of-ringsymp.html>.

The present members of the committee are H. Asashiba (Shizuoka Univ.), S. Ikehata (Okayama Univ.), S. Kawata (Osaka City Univ.) and I. Kikumasa (Yamaguchi Univ.).

The Proceedings of each Symposium are edited by the program organizer. If you wish to have these Proceedings, please ask the program organizer of each Symposium or one of the committee members.

The Symposium in 2016 will be held at Osaka Prefecture University from August 31 (Wed) to September 3 (Sat). The program organizer is A. Ueda (Shimane Univ.).

For information on ring theory and representation theory of groups and algebras (including schedules of meetings and symposiums), as well as ring mailing list service for registered members, please refer to the following websites, which are arranged by M. Sato and H. Miyahara (Yamanashi Univ.):

<http://fuji.cec.yamanashi.ac.jp/~ring/> (in Japanese)

(Mirror site: www.cec.yamanashi.ac.jp/~ring/)

<http://fuji.cec.yamanashi.ac.jp/~ring/japan/> (in English)

Hideto Asashiba
Shizuoka, Japan
January, 2016

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Preface

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Tsunekazu Nishinaka
Kobe, Japan
February, 2016

The 48th Symposium on Ring Theory and Representation Theory (2015)

Program

September 7 (Monday)

9:00–9:30 Obara Daiki (Tokyo University of Science)

On the Hochschild cohomology ring modulo nilpotence of the quiver algebra with quantum-like relations

9:40–10:10 Noritsugu Kameyama (Shinshu University), Mitsuo Hoshino (University of Tsukuba),
Hirotaka KOGA (Tokyo Denki University)

Crossed products for matrix rings

10:20–10:50 Hideto Asashiba (Shizuoka University)

Cohen-Montgomery duality of bimodules and its applications to equivalences given by bimodules

11:00–11:50 Jan Schröer (University of Bonn)

Convolution algebras and enveloping algebras I

13:40–14:10 Yu Liu (Nagoya University)

Cotorsion pairs on triangulated and exact categories

14:20–14:50 Yuya Mizuno (Nagoya University), Kota Yamaura (University of Yamanashi)

Higher APR tilting preserve n-representation infiniteness

15:00–15:30 Izuru Mori (Shizuoka University)

2-dimensional quantum Beilinson algebras

15:50–16:40 Susumu Ariki (Osaka University)

Survey on representation theory of quiver Hecke algebras I

16:50–17:40 Steffen Koenig (Universität Stuttgart)

Some special cases of Morita-Tachikawa correspondence

September 8 (Tuesday)

9:00–9:30 Yuta Kozakai (Tokyo University of Science), Naoko Kunugi (Tokyo University of Science)

Construction of two-sided tilting complexes for Brauer tree algebras

9:40–10:10 Takahide Adachi (Nagoya University)

The classification of two-term tilting complexes for Brauer graph algebras

10:20–10:50 Hirotaka Koga (Tokyo Denki University), Mitsuo Hoshino (University of Tsukuba)

Derived equivalences and Gorenstein projective dimension

11:00–11:50 Jan Schröer (University of Bonn)

Convolution algebras and enveloping algebras II

13:40–14:10 Ken-ichi Yoshida (Nihon University), Shiro Goto (Meiji University), Naoki Taniguchi (Meiji University), Naoyuki Matsuoka (Meiji University)

Almost Gorenstein Rees algebras

14:20–14:50 Hiroki Matsui (Nagoya University)

The structure of preenvelopes with respect to maximal Cohen-Macaulay modules

15:00–15:30 Ryo Takahashi (Nagoya University)

Thick subcategories of derived categories of isolated singularities

15:50–16:40 Susumu Ariki (Osaka University)

Survey on representation theory of quiver Hecke algebras II

16:50–17:40 Watatani Yasuo (Kyushu University)

Quivers, operators on Hilbert spaces and operator algebras I

September 9 (Wednesday)

9:00–9:30 Satoshi Yamanaka (Okayama University)

On weakly separable extensions and weakly quasi-separable extensions

9:40–10:10 Akira Ueda (Shimane University), Hidetoshi Marubayashi (Tokushima Bunri University)

Examples of Ore extensions which are maximal orders whose based rings are not maximal orders

- 10:20–10:50** Yotsanan Meemark (Chulalongkorn University)
Cayley Graphs over a Finite Chain Ring and GCD-graphs
- 11:00–11:50** Watatani Yasuo (Kyushu University)
Quivers, operators on Hilbert spaces and operator algebras II
- 13:40–14:10** Ryo Kanda (Nagoya University)
Atom-molecule correspondence in Grothendieck categories
- 14:20–14:50** Ayako Itaba (Shizuoka University)
Finite condition (Fg) for self-injective Koszul algebras
- 15:00–15:30** Hiroyuki Minamoto (Osaka Prefecture University)
Higher products on Yoneda Ext algebras
- 15:50–16:40** Steffen Koenig (Universität Stuttgart)
Filtered categories and representations of boxes
- 16:50–17:40** Masahisa Sato (Yamanashi university)
Special Lecture: Report on the 7th China-Japan-Korea International
Conference on Ring Theory
- 18:30–** Conference dinner

September 10 (Thursday)

- 9:00–9:30** Sota Asai (Nagoya University)
The Grothendieck groups of mesh algebras
- 9:40–10:10** Naoya Hiramatsu (Kure National College of Technology)
Stable degenerations of Cohen-Macaulay modules over simple singularities
of type (A_n)
- 10:20–10:50** Yuta Kimura (Nagoya University)
Tilting theory of preprojective algebras and c-sortable elements
- 11:10–11:40** Kenta Ueyama (Hirosaki University), Izuru Mori (Shizuoka University)
Tilting objects for noncommutative quotient singularities