Proceedings of the 51st Symposium on Ring Theory and Representation Theory

September 19 (Wed.) – 22 (Sat.), 2018
Okayama University of Science, Japan

Edited by
Izuru Mori
Shizuoka University

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第 51 回 環論および表現論シンポジウム報告集

2018 年 9 月 19 日 (水) – 22 日 (土)
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静岡大学

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 formed in 1997 to manage the Symposium, and its committee members are listed in the web page

http://www.ring-theory-japan.com/ring/h-of-ringsymp.html.

The present members of the committee are H. Asashiba (Shizuoka Univ.), T. Nishinaka (Univ. of Hyogo), S. Kawata (Nagoya 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.

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 edited by K. Yamaura (Univ. of Yamanashi):

http://www.ring-theory-japan.com/ring/ (in Japanese)

http://www.ring-theory-japan.com/ring/japan/ (in English)

The Symposium in 2019 will be held jointly with the 8-th China-Japan-Korea International Symposium on Ring Theory at Nagoya University from August 26 (Mon) to August 31 (Sat). Both will be held as the 19-th International Conference by Graduate School of Mathematics, Nagoya University. The program organizer is Masahisa Sato (Aichi University), and the local organizers are Osamu Iyama (Nagoya University) and Shigeto Kawata (Nagoya City University).

Hideto Asashiba
Shizuoka, Japan
February, 2019

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Preface

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Izuru Mori
Shizuoka, Japan
February, 2019

第51回環論および表現論シンポジウム
プログラム

9月19日（水）

9:40–10:10 亀山 統胤（サレジオ工業高等専門学校），星野 光男（筑波大学），古賀 寛尚（東京電機大学）

Frobenius ring homomorphisms

10:20–10:50 音喜多 純拓（千葉大学）

Centers of modular group algebras

11:00–12:00 柳川 浩二（関西大学）

Homological methods in combinatorial commutative algebra I

13:10–13:40 中嶋 祐介（東京大学）

Finite dimensional algebras arising from dimer models and their derived equivalences

13:50–14:20 青木 利隆（名古屋大学）

Torsion classes for algebras with radical square zero

14:30–15:00 埴原 紀宏（名古屋大学）

Auslander correspondence for triangulated categories

15:20–15:50 淺井 聡太（名古屋大学）

The chamber structures of the Grothendieck groups coming from bricks

16:00–17:00 Yu Qiu (Tsinghua University)

Decorated marked surfaces

9月20日（木）

9:40–10:10 松井 紘樹（名古屋大学）

Connectedness of the Balmer spectrum of the right bounded derived category of a commutative noetherian ring

10:20–10:50 荒谷 督司（岡山理科大学），飯間 圭一郎（奈良工業高等専門学校），小野 舞子（岡山大学），高橋 亮（名古屋大学）

Dimensions of singular categories of hypersurfaces of countable representation type

11:00–12:00 柳川 浩二（関西大学）

Homological methods in combinatorial commutative algebra II

13:10–13:40 源 泰幸（大阪府立大学）

Resolution of DG-modules and their applications for commutative DG-algebras

13:50–14:20 榎本 悠久（名古屋大学）

Relations for Grothendieck groups and representation-finiteness

14:30–15:00 水野 有哉（静岡大学）

Sortable elements and torsion pairs for quivers

15:20–15:50 足立 崇英（大阪府立大学），Aaron Chan（名古屋大学）

A geometric model of Brauer graph algebras

16:00–16:30 本瀬 香

Cyclotomic polynomials

17:30– 懇親会

9月21日（金）

9:40–10:10 板垣 智洋（東京理科大学）

Batalin-Vilkovisky algebra structures on the Hochschild cohomology of self-injective Nakayama algebras

10:20–10:50 中本 和典（山梨大学），鳥居 猛（岡山大）

An application of Hochschild cohomology to the moduli of subalgebras of the full matrix ring

11:00–12:00 中岡 宏行（鹿児島大学）

Some remarks on Avella-Alaminos-Geiss invariants of gentle algebras

13:10–13:40 佐藤 眞久（愛知大学・山梨大学）

On projective modules with unique maximal submodule

13:50–14:20 Gangyong Lee, Mauricio Medina-Bárcenas (Chungnam National University)

On (finite) Σ-Rickart modules: On a module theoretic setting of the (semi-) hereditary property of rings

14:30–15:00 塚本 真由（大阪市立大学）

A strongly quasi-hereditary structure on Auslander–Dlab–Ringel algebras

15:20–15:50 宮本 賢伍（大阪大学）

Components of the stable Auslander-Reiten quiver for a symmetric order over a complete discrete valuation ring

16:00–17:00 Yu Qiu (Tsinghua University)

$\mathbb{X}$-stability conditions on Calabi-Yau-$\mathbb{X}$ categories

9月22日（土）

9:40–10:10 越谷 重夫，櫻井 太朗（千葉大学）

On certain Morita invariants involving commutator subspace and radical powers

10:20–10:50 板場 綾子（東京理科大学），松野 仁樹（静岡大学）

The defining relations of geometric algebras of Type EC

11:00–11:30 増岡 彰（筑波大学）

Quotients G/H in super-symmetry

The 51st Symposium on Ring Theory and Representation Theory

Program

September 19 (Wednesday)

9:40–10:10 Mitsuo Hoshino (University of Tsukuba), Hirotaka Koga (Tokyo Denki University), Noritsugu Kameyama (Salesian Polytechnic)

Frobenius ring homomorphisms

10:20–10:50 Yoshihiro Otokita (Chiba University)

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Cyclotomic polynomials

17:30– Conference dinner

September 21 (Friday)

9:40–10:10 Tomohiro Itagaki (Tokyo University of Science)

Batalin-Vilkovisky algebra structures on the Hochschild cohomology of self-injective Nakayama algebras

10:20–10:50 Kazunori Nakamoto (University of Yamanashi), Takeshi Torii (Okayama University)

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9:40–10:10 Shigeo Koshitani, Taro Sakurai (Chiba University)

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