# The 37th Japan Symposium on Commutative Algebra Program

**Duration :** November 18–22, 2015

Venue : Kurashiki Seaside Hotel Training building 4F, Lecture Room (Free discussion at Room 208 on 2F)

Conference site: https://sites.google.com/site/jsca37kurashiki/

Organizers Yuji Yoshino (Okayama Univ), Tokuji Araya (Okayama Univ of Science), Mitsuyasu Hashimoto (Okayama Univ)

Please registrate by Wednesday, September 30 from the conference site (URL above). For inquiries, please e-mail to 2015jsca37 at gmail.com (please replace "at" by "@").

## Wednesday, November 18

15:00–15:50 Ryota Okazaki (Fukuoka Univ of Education) and Kohji Yanagawa (Kansai Univ)

The Cohen–Macaulayness of the bounded complex of an affine oriented matroid

16:15–16:55 Ayesha Asloob Qureshi (Osaka Univ)

Algebraic structures arising from isotone maps between posets

17:10–18:00 Akihiro Higashitani (Kyoto Sangyo Univ)

Almost Gorenstein homogeneous rings and their h-vectors

#### 19:00 - 21:00

Free discussion (Room 208, Training building 2F)

#### Thursday, November 19

9:00–10:00 Luchezar Avramov (Univ of Nebraska–Lincoln)

Polynomial growth of Betti sequences over local rings

10:15–10:55 Ryo Kanda (Nagoya Univ)

Localizing subcategories closed under injective envelopes and extension groups between atoms

11:10–12:00 Yusuke Nakajima (Nagoya Univ)

Singularities characterized by non-commutative crepant resolutions

13:40–14:40 Ryo Takahashi (Nagoya Univ)

Thick subcategories over isolated singularities

14:55–15:35 Hiroki Matsui (Nagoya Univ)

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

16:05–17:05 Osamu Iyama (Nagoya Univ)

Tilting theory for Gorenstein rings in dimension one

17:20–18:00 Tokuji Araya (Okayama Univ of Science)

Remarks on some homological conjectures

19:00 - 21:00

Free discussion (Room 208, Training building 2F)

### Friday, November 20

9:00–10:00 Luchezar Avramov (Univ of Nebraska–Lincoln)

Vanishing of (co)homology over commutative noetherian rings

10:15–10:55 Chikashi Miyazaki (Kumamoto Univ)

Buchsbaum criterion of Segre products of Buchsbaum modules

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11:10–11:50 Futoshi Hayasaka (Hokkaido Univ of Education)
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Computations of the associated Buchsbaum–Rim multiplicities of a direct sum of cyclic modules

14:00–14:50 Shiro Goto (Meiji Univ), Naoyuki Matsuoka (Meiji Univ), Naoki Taniguchi (Meiji Univ), and Ken-ichi Yoshida (Nihon Univ)

The almost Gorenstein Rees algebras of socle ideals

15:05–15:55 Kazuho Ozeki (Yamaguchi Univ) and Maria Evelina Rossi (Univ of Genova)

The structure of the filtration of Sally modues

16:25–17:05 Hirotaka Higashidaira (Meiji Univ)

On the sequentially Cohen–Macaulay properties of almost complete multipartite graphs

17:20–18:00 Kazunori Matsuda (Osaka Univ)

Normal and Gorenstein Fano polytopes arising from order polytopes and chain polytopes and their Ehrhart polynomials

#### 19:00 - 21:00

Free discussion (Room 208, Training building 2F)

## Saturday, November 21

**9:00–9:50** Tomohiro Okuma (Yamagata Univ), **Kei-ichi Watanabe** (Nihon Univ), and Ken-ichi Yoshida (Nihon Univ)

A characterization of 2-dimensional rational singularities via Core of ideals

10:05–10:55 Ken-ichi Yoshida (Nihon Univ), Shiro Goto (Meiji Univ), Naoyuki Matsuoka (Meiji Univ), and Naoki Taniguchi (Meiji Univ)

Almost Gorenstein Rees algebras of some integrally closed ideals

11:10–11:50 Akiyoshi Sannai (Univ of Tokyo / Meiji Univ)

On dual F-signature of complexes

13:40–14:40 Shigeru Kuroda (Tokyo Metropolitan Univ)

Polynomial automorphisms of characteristic order

14:55–15:35 Ryuji Tanimoto (Shizuoka Univ)

Modular invariant rings of cyclic groups of prime order

16:05–16:45 Maiko Ono (Okayama Univ) and Yuji Yoshino (Okayama Univ)

The principle of Auslander-Reiten duality

17:00–17:50 Toshio Sumi (Kyushu Univ), Mitsuhiro Miyazaki (Kyoto Univ of Education), and Toshio Sakata (Kyushu Univ)

On the real radical of certain determinantal ideals defined by tensors

18:40- Banquet

### Sunday, November 22

9:00 - 9:50

Kazuma Shimomoto (Nihon Univ) and Kazuhiko Kurano (Meiji Univ)

A new proof of a theorem of Cohen and Gabber with its application

10:10–10:50 Naoya Hiramatsu (National Institute of Technology, Kure College)

On stable degenerations of Cohen–Macaulay modules over simple singularities of type  $(A_n)$ 

11:05–11:45 Satoshi Murai (Osaka Univ)

Ring isomorphisms of cohomologies of certain toric manifolds