The 46th Japan Symposium on Commutative Algebra

November 20-24 (Thu.-Mon.), 2025
Hotel Fukuracia Osaka Bay   Conference Room B

Program

November 20 (Thu.)

13:40–13:50   Introduction

13:50–14:40   **Ryo Takahashi** (Nagoya University)
On the ubiquity of dominant local rings

14:55–15:20   **Shinnosuke Kosaka** (Nagoya University)
The finiteness of injective dimension of modules over local rings

15:30–15:55   **Yuki Mifune** (Nagoya University)
Generation of singularity categories and vanishing of cohomology annihilators

16:10–16:35   **Kei-ichiro Iima** (National Institute of Technology (KOSEN), Nara College)
On the extension-closed subcategories of the Cohen–Macaulay module category
over simple singularities

16:45–17:10   **Toshinori Kobayashi** (Meiji University)
KE-closed subcategories over a commutative noetherian ring

17:20–17:45   **Hiroki Matsui** (Tokushima University)
A generalization of the maximal Cohen–Macaulay approximation theorem and
its applications

November 21 (Fri.)

9:10–10:10 **Uwe Nagel** （University of Kentucky）
Commutative algebra up to symmetry

10:30–10:55 **Satoshi Murai** (Waseda University)
Freeness of restrictions of hyperplane arrangements and
height two Cohen–Macaulay ideals

11:05–11:30 Kazufumi Eto (Nippon Institute of Technology)
Takahiro Numata (Meiji University)
Naoyuki Matsuoka (Meiji University)
Kei-ichi Watanabe (Nihon University, Meiji University)
Stretched semigroup rings and 2-minor generation in defining ideals

11:40–12:05 **Kou Takahashi** (Waseda University)
Defining ideals in numerical semigroup rings with
arithmetic Pseudo-Frobenius numbers

Lunch

14:30–15:00 **Meeting about the symposia (For Japanese participants)**

15:05–15:30 **Tatsuki Yamaguchi** (Institute of Science Tokyo)
Mixed characteristic reduction and BCM-regularity

15:40–16:05 **Kenta Sato** (Chiba University)
Frobenius liftability and Lipman-Zariski conjecture

16:15–16:40 **Kaito Kimura** (Nagoya University)
Conductors, test ideals, and ideals generated by systems of parameters

16:50–17:15 Ela Celikbas (West Virginia University)
Olgur Celikbas (West Virginia University)
Naoki Endo (Meiji University)
Shinya Kumashiro (Osaka Institute of Technology)
A note on modules with minimal multiplicity

18:00– **Banquet**

November 22 (Sat.)

9:10–10:10   **Aldo Conca** （University of Genova）
From linear resolutions to Cartwright–Sturmfels ideals

10:30–10:55   **Koichiro Tani** (Osaka University)
Standard multigraded Hibi rings and Cartwright–Sturmfels ideals

11:05–11:30   **Koji Matsushita** (The University of Tokyo)
Gorensteinness of Ehrhart rings of matching polytopes

11:40–12:05   **Kenta Mori** (Kwansei Gakuin University)
Toric ideals of matching polytopes and graph coloring theory

Lunch

14:00–14:50   **Shigeru Kuroda** (Tokyo Metropolitan University)
Wild polynomial automorphisms over a field of positive characteristic

15:05–15:30   **Ryo Ishizuka** (Institute of Science Tokyo)
Perfectoid towers arising from Frobenius lifts

15:40–16:05   **Shinnosuke Ishiro**
(National Institute of Technology (KOSEN), Gunma College)
Perfectoid towers and lim Cohen–Macaulay sequences

16:15–16:40   **Kazuki Hayashi** (Institute of Science Tokyo)
A refinement of Fontaine's map for perfectoid towers and its applications

16:55–17:45   **Chikashi Miyazaki** (Kumamoto University)
Towards a structure theorem for quasi-Buchsbaum bundles on $\mathbb{P}^3$

November 23 (Sun.)

9:10–10:10   **Somayeh Moradi** （Ilam University）
Powers of ideals with linear or componentwise linear resolutions

10:30–10:55   **Yuji Muta** (Okayama University)
Naoki Terai (Okayama University)
Serre depth and symbolic powers on Stanley–Reisner rings

11:05–11:30   **Ken-ichi Yoshida** (Nihon University)
The Golod property of Buchsbaum local rings of maximal embedding dimension

11:40–12:05   **Kohji Yanagawa** (Kansai University)
Combinatorics of q-deformed rationals

Lunch

14:00–14:50   **Izuru Mori** (Shizuoka University)
Classification of regular nets of conics

15:05–15:30   **Yuya Otake** (Nagoya University)
On the invariants of Auslander and Martsinkovsky

15:40–16:05   **Takuma Seno** (Osaka Metropolitan University)
A new proof of non-Cohen–Macaulayness of Bertin's example

16:15–16:40   **Ryu Tomonaga** (The University of Tokyo)
NCCRs of toric singularities with divisor class rank one

16:55–17:45   **Norihiro Hanihara** (Kyushu University)
Non-commutative crepant resolutions via tilting bundles

November 24 (Mon.)

9:10–10:00 **Mitsuhiro Miyazaki** (Osaka Metropolitan University)
Canonical trace radical property: a new property of commutative rings

10:15–10:40 **Sora Miyashita** (Osaka University)
The canonical trace of Stanley–Reisner rings

10:50–11:15 **Taiga Ozaki** (Institute of Science Tokyo)
On higher dimensional Teter rings via the canonical trace ideal

11:25–12:15 Tomohiro Okuma（Yamagata University）
Ken-ichi Yoshida（Nihon University）
Kei-ichi Watanabe (Nihon University, Meiji University)
Nearly Gorenstein and almost Gorenstein 2-dimensional normal local rings