THE 44TH JAPAN SYMPOSIUM ON COMMUTATIVE ALGEBRA

Program

November 22

15:20–15:30 Opening Remarks

15:30–16:10 **Ryo Takahashi** (Nagoya University)
Classifying resolving subcategories of derived categories

16:20–16:45 **Yuya Otake** (Nagoya University)
On Yoshino's stable complex theory

17:00–17:25 **Naoya Hiramatsu** (National Institute of Technology, Kure College)
The spectrum of the category of maximal Cohen-Macaulay modules over complete
Cohen-Macaulay local rings

17:35–18:00 **Takanori Nagamine**[*] (National Institute of Technology, Oyama College)
Gene Freudenburg (Western Michigan University)
Affine and Unirational unique factorial domains with unmixed gradings

November 23

9:00–9:40 **Tsutomu Nakamura** (Mie University)
Govorov-Lazard type theorems and complete big Cohen-Macaulay modules

9:50–10:15 **Takesi Kawasaki** (Tokyo Metropolitan University)
On Small Cohen-Macaulay Conjecture for local rings such that depth $=$ dim-1

10:35–11:00 **Nguyen Dang Hop** (Institute of Mathematics, VAST)
The Koszul property and free resolutions over g-stretched local rings

11:10–12:00 **Bernd Ulrich** (Purdue University)
Generalized Jouanolou duality, weakly Gorenstein rings, and the implicitization
problem

[Lunch]

13:30–14:20 **Jason McCullough** (Iowa State University)
The Koszul property for algebras associated to matroids

14:35–15:00 **Naoki Terai** (Okayama University)
2-Cohen-Macaulay Stanley-Reisner rings with codimension two

15:20–15:45 **Sora Miyashita** (Osaka University)

Comparing generalizations of Gorensteinness in semi-standard graded rings

15:55–16:20 **Naoki Wakasugi** (Nagoya University)

On the category of cofinite modules and local cohomology modules

16:30–16:55 **Yuki Mifune** (Nagoya University)

The divergence of radii of resolving subcategories

17:05–17:30 **Ryo Ishizuka** (Tokyo Institute of Technology)

Ideal correspondence between a perfectoid ring and its tilt

19:00– [Banquet]

November 24

9:00–9:40 **Ken-ichi Yoshida**[*] (Nihon University),
Tomohiro Okuma (Yamagata University),
Kei-ichi Watanabe (Nihon University, Meiji University)

Gorenstein normal tangent cones

9:50–10:15 **Tatsuki Yamaguchi** (The University of Tokyo)

F-pure singularities in equal characteristic zero

10:35–11:00 **Wahei Hara** (Kavli IPMU)

Spherical object in dimension two and three

11:10–12:00 **Ilya Smirnov** (Basque Center for Applied Mathematics)

Recent progress in the theory of dual F-signature

[Lunch]

13:30–14:00 Meeting about the symposia (For Japanese participants)

14:00–14:50 **Doan Trung Cuong** (Institute of Mathematics, VAST)

Defect function and flat descent

15:05–15:30 **Hoang Le Truong** (Institute of Mathematics, VAST, Nihon University)

Stable Ulrich bundles on cubic fourfolds

15:40–16:20 **Chikashi Miyazaki** (Kumamoto University)

Castelnuovo-type bounds on the Castelnuovo-Mumford regularity and Horrocks-type theorems for vector bundles

16:35–17:00 **Norihiro Hanihara** (Kavli IPMU)

Reflexive modules over Auslander-Gorenstein rings

17:10–17:50 **Osamu Iyama** (The University of Tokyo)

Tilting theory via g-fans in real Grothendieck groups

Nobember 25

9:00–9:40 **Mitsuhiro Miyazaki** (Kyoto University of Education)
Limit Frobenius complexity and toric face rings

9:50–10:15 **Akihiro Higashitani** (Osaka University)
Difference of Hilbert series of homogeneous affine semigroup ring and its normalization

10:35–11:00 **Nayana Shibu Deepthi** (Osaka University)
h-vectors of edge rings of odd-cycle compositions

11:10–11:35 **Koji Matsushita** (Osaka University)
Non-commutative crepant resolutions of a special family of stable set rings

11:45–12:10 **Kenta Mori** (Kwansei Gakuin University)
Toric rings of perfectly matchable subgraph polytopes

[Lunch]

14:00–14:25 **Kaito Kimura** (Nagoya University)
Asymptotic Bass numbers over local rings

14:35–15:00 **Futoshi Hayasaka**[*] (Okayama University)
Haruto Imamura (Okayama University)
An example to a question of Ratliff on asymptotic prime divisors

15:10–15:35 **Jun Horiuchi**[*] (Nippon Institute of Technology)
Kazuma Shimomoto (Tokyo Institute of Technology)
Seminormality and graded rings

15:55–16:20 **Shinnosuke Ishiro** (Tokyo Institute of Technology)
The divisor class group of a complete local log-regular ring

16:30–17:10 **Kazuma Shimomoto** (Tokyo Institute of Technology)
On p-adic deformation of cohomology theory and singularities

November 26

9:00–9:25 **Toshinori Kobayashi** (Meiji University)
Semidualizing modules over numerical semigroup rings

9:35–10:00 **Hiroki Matsui** (Tokushima University)
Characterization of local rings via reducing homological dimensions

10:10–10:50 **Mitsuyasu Hashimoto** (Osaka Metropolitan University)
FFRT property of the rings of invariants under the actions of finite groups

(* indicates the speaker.)