

RIMS Workshop



The 45th Japan Symposium on Commutative Algebra

Organizers:

Kyouko Kimura (Shizuoka University)

Hidefumi Ohsugi (Kwansei Gakuin University)

Shunsuke Takagi (University of Tokyo)

Ryo Takahashi (Nagoya University)

Dates:

November 18 (Mon.) -- November 22 (Fri.), 2024

Place:

Room 420, Research Institute for Mathematical Sciences (RIMS)

Kyoto University, Kyoto 606-8502, JAPAN

The 45th Japan Symposium on Commutative Algebra

Program

Nov. 18 (Mon.)

- 09:50--10:00 Introduction
- 10:00--10:45 Hiroki Matsui (Tokushima University)
Spectra of triangulated categories and their applications to affine and projective varieties
- 11:00--11:30 Yuki Mifune (Nagoya University)
The finiteness of dimensions and radii of subcategories of modules
- 11:40--12:10 Yuya Otake (Nagoya University), Kaito Kimura (Nagoya University)
On local rings of finite syzygy representation type
- 13:45--14:30 Shiji Lyu (University of Illinois at Chicago)
Popescu-type approximation of complete local rings and applications
- 14:45--15:15 Ryo Ishizuka (Institute of Science Tokyo)
Prismatic Kunz's theorem
- 15:30--16:00 Akiyoshi Tsuchiya (Toho University)
Examining Kempe equivalence via commutative algebra
- 16:15--16:45 Sora Miyashita (Osaka University)
A linear variant of the nearly Gorenstein property

Nov. 19 (Tue.)

- 10:00--11:00 Wenliang Zhang (University of Illinois at Chicago)
Homological properties of F -modules
- 11:15--12:00 Shinichi Tajima (Niigata University)
Holonomic D -modules and Noetherian differential operators for local cohomology classes associated to primary ideals
- 13:45--14:30 Tomohiro Okuma (Yamagata University), Kei-ichi Watanabe (Nihon University/ Meiji University), Ken-ichi Yoshida (Nihon University)
Upper bounds of normal reduction numbers of integrally closed ideals in a 2-dimensional normal rings
- 14:45--15:15 Kenta Sato (Chiba University)
Normal Cohen-Macaulay Rees algebra via multiplier/test ideals
- 15:30--16:00 Tatsuki Yamaguchi (Institute of Science Tokyo)
Uniform positivity of F -signature of modulo p reduction
- 16:15--16:45 Mitsuyasu Hashimoto (Osaka Metropolitan University)
Indecomposability of graded modules over a graded ring
- 18:00--20:00 Banquet

Nov. 20 (Wed.)

- 10:00--11:00 Holger Brenner (Universität Osnabrück)
Module schemes in invariant theory
- 11:15--11:45 Takanori Nagamine (Nihon University)
On an algebra whose quotient field is retract rational
- 11:55--12:25 Toshinori Kobayashi (Meiji University)
Golod rings and syzygies of the residue field
- 13:45--16:45 Free discussion

Nov. 21 (Thu.)

- 10:00--11:00 Nursel Erey (Gebze Technical University)
Normalized depth and regularity of squarefree powers
- 11:15--12:00 Kohji Yanagawa (Kansai University)
Local cohomology modules at ideals associated with simplicial posets
- 13:45--14:30 Cheng Meng (Tsinghua University)
 h -function of local rings of characteristic p
- 14:45--15:15 Koji Matsushita (Osaka University)
Dual F -signatures of Veronese subrings and Segre products of polynomial rings
- 15:30--16:00 Kazufumi Eto (Nippon Institute of Technology), Naoyuki Matsuoka (Meiji University), Takahiro Numata (Meiji University), Kei-ichi Watanabe (Nihon University/ Meiji University)
An upper bound for the Frobenius number and stretched numerical semigroups
- 16:15--16:45 Tatsuya Kataoka (Okayama University), Yuji Muta (Okayama University), Naoki Terai (Okayama University)
The v -numbers of squarefree monomial ideals

Nov. 22 (Fri.)

- 10:00--10:45 Naoki Endo (Meiji University)
Extended canonical ideals and Goto rings
- 11:00--11:30 Koichiro Tani (Osaka University)
Best possible degree bound for Gröbner bases of 1-dimensional ideals
- 11:40--12:10 Akihiro Higashitani (Osaka University)
Binomial edge rings of complete bipartite graphs