

RIMS Workshop

The 39th Japan Symposium on Commutative Algebra

Organizers : Hidefumi Ohsugi (Kwansei Gakuin University)

Shunsuke Takagi (University of Tokyo)

Ryo Takahashi (Nagoya University)

Dates : November 13 (Mon.) – November 17 (Fri.), 2017

Place : Room 420, Research Institute for Mathematical Sciences (RIMS)

Kyoto University, Kyoto 606-8502, JAPAN

Program

Nov. 13 (Mon.)

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|-------------|--|
| 10:00–10:10 | Introduction |
| 10:10–10:55 | Yuji Yoshino (Okayama University)
<i>Stable ‘complex’ theory</i> |
| 11:05–11:35 | Tokuji Araya (Okayama University of Science)
<i>On the vanishing of self extensions over Cohen-Macaulay local rings</i> |
| 11:45–12:15 | Tsutomu Nakamura (Okayama University)
<i>Localization functors and Čech complexes in derived categories</i> |
| 13:50–14:35 | Shiro Goto, Shinya Kumashiro (Chiba University)
<i>Ulrich ideals and G-regular rings</i> |
| 14:45–15:15 | Shinya Kumashiro (Chiba University)
<i>Ubiquity of Ulrich ideals in dimension one</i> |
| 15:35–16:05 | Ryotaro Isobe (Chiba University)
<i>Characterization of GGL rings</i> |
| 16:15–16:45 | Naoyuki Matsuoka (Meiji University)
<i>Pseudo-Frobenius numbers versus defining ideals in numerical semigroup rings</i> |

Nov. 14 (Tues.)

- 9:50–10:35 Junzo Watanabe (Tokai University)
The resultants of quadratic binomials
- 10:45–11:30 Kohji Yanagawa (Kansai University)
When is a Specht ideal Cohen-Macaulay?
- 11:40–12:10 Yukio Hirayama (Osaka Prefecture University)
Sperner properties of polynomial rings
- 13:45–14:45 Graham Leuschke (Syracuse University)
A generalization of Knörrer periodicity with an application to noncommutative hypersurfaces
- 14:55–15:25 Kaori Shimada (Meiji University)
On the category of maximal Cohen-Macaulay modules over $\mathbb{C}[[x, y]]/(x^3)$
- 15:45–16:15 Naoya Hiramatsu (National Institute of Technology, Kure College)
On degenerations of Cohen-Macaulay modules via matrix representations
- 16:25–16:55 Tran Thi Phuong (Meiji University)
Normal Sally module of rank one
- 18:00–20:00 Banquet

Nov. 15 (Wed.)

- 9:50–10:35 Shigeru Kuroda (Tokyo Metropolitan University)
Non-finitely generated polynomial subrings and birational modifications of \mathbf{G}_a -actions
- 10:45–11:15 Ryuji Tanimoto (Shizuoka University)
Modular invariant rings for p -cyclic group actions
- 11:25–11:55 Takanori Nagamine (Niigata University)
Derivations and closed polynomials in polynomial rings
- 13:30–14:30 Anurag Singh (University of Utah)
Hankel determinantal rings have rational singularities
- 14:40–15:25 Kazuma Shimomoto (Nihon University)
Big Cohen-Macaulay algebra via perfectoid spaces
- 15:45–16:15 Shinichi Tajima (University of Tsukuba)
Local cohomology and generalized integral dependence relations w.r.t ideals in local rings
- 16:25–16:55 Koji Nishida (Chiba University)
On the symbolic Rees rings for Fermat ideals

Nov. 16 (Thur.)

- 9:50–10:35 Kei-ichi Watanabe (Nihon University)
Homogeneous prime element of 2-dimensional normal graded rings
- 10:45–11:15 Tomohiro Okuma (Yamagata University),
Kei-ichi Watanabe (Nihon University),
Ken-ichi Yoshida (Nihon University)
Normal and core reduction numbers
- 11:25–11:55 Kohsuke Shibata (University of Tokyo)
Upper bound of the multiplicity of locally complete intersection singularities
- 13:30–14:15 Mitsuhiro Miyazaki (Kyoto University of Education)
Negative and positive symbolic powers of the canonical ideal of a Hibi ring
- 14:25–15:10 Yusuke Nakajima (Kavli IPMU)
On the Frobenius push-forward of Hibi rings
- 15:30–16:00 Akihiro Higashitani (Kyoto Sangyo University)
Generalized F -signature of Hibi rings
- 16:10–16:55 Kenta Sato (University of Tokyo)
Ascending chain condition for F -pure thresholds

Nov. 17 (Fri.)

- 9:50–10:35 Osamu Iyama (Nagoya University)
Hypersurface singularities and 2-hereditary algebras
- 10:45–11:15 Hiroki Matsui (Nagoya University)
Singular equivalence and reconstruction of singular loci
- 11:25–11:55 Toshinori Kobayashi (Nagoya University)
On delta invariants of certain ideals
- 13:40–14:10 Futoshi Hayasaka (Okayama University)
On the associated Buchsbaum-Rim multiplicities of a direct sum of cyclic modules
- 14:20–15:05 Naoki Taniguchi (Waseda University)
On Ratliff-Rush closure of modules
- 15:15–16:00 Satoshi Murai (Osaka University)
Hessenberg varieties and hyperplane arrangements