

The 30th Conference on Commutative Algebra, Japan

Invited Speakers :

Si-jong Kwak KAIST, Korea
Gennady Lyubeznik University of Minnesota, USA
Irena Swanson Reed College, USA

Organizers :

Chikashi Miyazaki (chief) Saga University
Shunsuke Takagi Kyushu University
Naoki Terai Saga University

Conference Web Page

<http://www2.math.kyushu-u.ac.jp/~stakagi/casympo30/index.html>

Date : November 18 – 21, 2008
Venue : Kokuminshukusha Niji-no-Matsubara Hotel
 Karatsu, Saga, Japan
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Transportation

- 1) **From Fukuoka Airport, take a subway at the domestic terminal.** There is shuttle bus service between the domestic and international terminals of the airport. Every train goes towards the right direction mainly from Fukuoka Airport to Hakata, Tenjin, Meinohama, Chikuzen Maebaru, Niji-no-Matsubara, Higashi-Karatsu, Watada, Karatsu and Nishi-Karatsu. We suggest that you should get on a train for Chikuzen Maebaru or (Nishi-)Karatsu. You may need to change trains at (Meinohama and) Chikuzen Maebaru for (Nishi-)Karatsu. JR trains for (Nishi-)Karatsu start at Chikuzen Maebaru every 30 minutes including direct trains from the airport. Then get off the train at Higashi-Karatsu or Karatsu. It takes 70 minutes and costs 1,040 yen from the airport to Higashi-Karatsu. We will pick you up by bus at 15:15 at Karatsu, 16:15 at Higashi-Karatsu and 17:20 at Higashi-Karatsu only on November 18. Otherwise, get off at **Higashi-Karatsu station** and take a taxi to **Kokuminshukusha Niji-no-Matsubara Hotel**. Do **not** get off the train at **Niji-no-Matsubara station**.
- 2) **From JR Hakata Station, take a subway** coming from Fukuoka Airport. Then follow the way as from the airport.

Program

- 18th (Tue) Evening Session
- 19:00 – 19:30 Takafumi Shibuta, Shunsuke Takagi (Kyushu)
Log canonical thresholds of binomial ideals
- 19:40 – 20:10 Takafumi Shibuta (Kyushu)
Computations of multiplier ideals via Bernstein-Sato polynomials
- 20:20 – 21:00 Shigeru Kuroda (Tokyo Metro.)
A simple proof of Nowicki's conjecture on the kernel of
an elementary deviation
- 19th (Wed) Morning Session
- 9:00 – 9:40 Gennady Lyubeznik (Minnesota, USA)
On some numerical invariants of local rings and projective varieties, I
- 10:00 – 10:40 Masa-Nori Ishida (Tohoku)
Cohomology groups of semigroup rings and toric varieties
- 11:00 – 11:40 Mitsuyasu Hashimoto (Nagoya)
 G -prime and G -primary G -ideals on G -schemes
- Afternoon Session
- 13:20 – 14:00 Irena Swanson (Reed College, USA)
Goto numbers of parameter ideals (joint work with William Heinzer)
- 14:20 – 15:00 Shiro Goto, Kazuho Ozeki (Meiji)
The structure of Sally modules of rank one
– the Buchsbaum case –
- 15:15 – 15:45 Kazuma Shimomoto (Minnesota, USA)
On the system of parameters of local rings in mixed characteristic
- Evening Session
- 19:00 – 19:30 Satoshi Ohnishi, Kei-ichi Watanabe (Nihon)
Coefficient ideals of ideals generated by monomials
- 19:40 – 20:10 Ken-ichiroh Kawasaki (Nara Edu.)
On a category of cofinite modules
- 20:20 – 20:35 Kyouko Kimura (Nagoya)
Lyubeznik resolution and the arithmetical rank of monomial ideals
- 20:45 – 21:00 Masahiro Ohtani (Nagoya)
Ideals generated by some 2-minors

- 20th (Thu) Morning Session
- 9:00 – 9:40 Gennady Lyubeznik (Minnesota, USA)
On some numerical invariants of local rings and projective varieties, II
- 10:00 – 10:40 Si-jong Kwak (KAIST, Korea)
Structure theorems of projected varieties according to moving the center
- 11:00 – 11:40 Kohji Yanagawa (Kansai)
Dualizing complex of a toric face ring
– normal and non-normal cases –
- Afternoon Session
- 13:40 – 14:20 Irena Swanson (Reed College, USA)
Integral closure algorithms (joint work with Anurag Singh)
- 14:35 – 14:50 Hirotada Itoh, Shuzo Izumi (Kinki)
Diophantine inequality for equi-characteristic excellent Henselian domains
- 15:00 – 15:30 Tokuji Araya (Nara Edu.)
Stable categories and derived categories
- Late Afternoon Session
- 16:00 – 16:30 Naoya Hiramatsu, Yuji Yoshino (Okayama)
Picard groups and automorphism groups of categories
- 16:40 – 17:10 Yuji Yoshino, Takeshi Yoshizawa (Okayama)
Left versus right action of Frobenius
- 17:20 – 18:00 Ryo Takahashi (Shinshu)
Modules in resolving subcategories
- Banquet
- 21th (Fri) Morning Session
- 9:00 – 9:30 Koji Nishida (Chiba)
On the third symbolic powers of prime ideals
defining space monomial curves
- 9:40 – 10:10 Satoshi Murai (Osaka)
Strongly edge decomposable simplicial complexes are Lefschetz
- 10:30 – 11:00 Futoshi Hayasaka (Meiji)
A note on the Buchsbaum-Rim multiplicity
- 11:10 – 11:50 Mitsuhiro Miyazaki (Kyoto Edu.)
A criterion of Gorenstein property of doted Hibi ring