

RIMS Workshop  
“Combinatorial Representation Theory and Related Topics”

Date October 19 (Mon.) – 22 (Thu.)

Venue Room 110 (1st floor), Research Institute for Mathematical Sciences,  
Kyoto University

Organizer Katsuyuki Naoi (Tokyo University of Agriculture and Technology)

Web page <http://www.tuat.ac.jp/~naoik/Combinatorics/Combi.html>

10/19 (Mon.)

- 13:30 – 14:30 Tatsuyuki HIKITA (Kyoto University)  
On an algebro-geometric realization of the cohomology ring of conical symplectic resolutions
- 14:45 – 15:45 Tomoo MATSUMURA (Okayama University of Science)  
Kempf-Laksov determinant formula in the infinitesimal cohomology theories
- 16:00 – 17:00 Naoki FUJITA (Tokyo Institute of Technology)  
Newton-Okounkov bodies of Schubert varieties and polyhedral realizations of crystal bases

10/20 (Tue.)

- 10:00 – 11:00 Shunsuke TSUCHIOKA (The University of Tokyo)  
On a general Schur’s partition identity
- 11:15 – 12:15 Ronald C. KING (University of Southampton/The University of Tokyo)  
Factorial characters of classical Lie groups
- 13:30 – 14:30 Naoya SHIMAMOTO (The University of Tokyo)  
The orbit decompositions of multiple flag manifolds of  $SL(n, \mathbb{C})$
- 14:45 – 15:45 Takuma HAYASHI (The university of Tokyo)  
The Zuckerman functor over a commutative ring
- 16:00 – 17:00 Hideya WATANABE (Tokyo Institute of Technology)  
A Combinatorial Formula for Periodic R-polynomials and for Periodic Kazhdan-Lusztig Polynomials

## 10/21 (Wed.)

- 10:00 – 11:00 Soichi OKADA (Nagoya University)  
Young books and  $q$ -Selberg integrals
- 11:15 – 12:15 Masao ISHIKAWA (University of the Ryukyus)  
Domino tilings of Aztec rectangle with connected holes
- 13:30 – 14:30 Shouya MARUYAMA (The University of Tokyo)  
Combinatorial R, Tetrahedron equation and Multi-species TASEP
- 14:45 – 15:45 Kazuya KAWASETSU (The University of Tokyo)  
Generalized principal subspaces and an intermediate vertex subalgebra

- On the third day the meeting is closed at this time since a regular seminar is planned to hold in the room.

## 10/22 (Thu.)

- 10:00 – 11:00 Ryo KANDA (Nagoya University)  
Every poset appears as the atom spectrum of some Grothendieck category
- 11:15 – 12:15 Yuya MIZUNO (Nagoya University)  
Categorification of Weyl groups and braid groups
- 12:30 – 13:30 Ryoichi KASE (Nara Women's University)  
Remarks on the lengths of maximal green sequences for type  $\tilde{A}_{n,1}$  quivers