

# RIMS Conference 2014

## New Developments on Representation Theory and Harmonic Analysis

**Date** June 24–27, 2014

**Place** Room 420, Research Institute for Mathematical Sciences, Kyoto University

**Organizer** Yasufumi Hashimoto (University of the Ryukyus)

### Program

#### June 24 (Tue.)

**13:30 – 14:20** Tomoyuki Tamura (Kyushu University)  
Characters of symmetric power representations  
and exterior power representations of finite groups

**14:40 – 15:30** Yamaguchi Naoya (Kyushu University)  
Factorization of group determinant in some group algebras

**15:50 – 16:40** Masato Wakayama (Kyushu University)  
Non-commutative harmonic oscillators and the Rabi model

#### June 25 (Wed.)

**10:00 – 10:50** Yuichiro Tanaka (The University of Tokyo)  
Visible actions on affine spherical varieties and applications

**11:10 – 12:00** Yosuke Morita (The University of Tokyo)  
A topological obstruction for the existence of compact quotients of homogeneous spaces

**13:30 – 14:20** Yuki Kanakubo (Sophia University)  
Cluster variables on double Bruhat cells  
and monomial realizations of crystal bases

**14:40 – 15:30** Cid Reyes (Kyushu University)  
Group-Subgroup pair graphs

**15:50 – 16:40** Hideto Nakashima (Kyushu University)  
Basic relative invariants of homogeneous cones

**June 26 (Thu.)**

- 10:00 – 10:50** Toshihisa KUBO (The University of Tokyo)  
The Dynkin index and parabolic subalgebra of Heisenberg type
- 11:10 – 12:00** Toshihiko Matsuki (Ryukoku University)  
Orthogonal multiple flag varieties of finite type: Odd degree case
- 13:30 – 14:20** Kazuhide Oshiro (Nagoya University)  
Continuous wavelet transforms on spaces of vector-valued functions
- 14:40 – 15:30** Takashi Hashimoto (The University of Tottori)  
Quantization of the moment map on symplectic vector space  
and the oscillator representation
- 15:50 – 16:40** Yoshiyuki Kimura (Osaka City University)  
Quiver varieties and quantum cluster algebras

**June 27 (Fri.)**

- 10:00 – 10:50** Genki Shibukawa (Kyushu University)  
Multivariate Meixner, Charlier and Krawtchouk polynomials
- 11:10 – 12:00** Kentaro Okamoto (Kyushu University)  
Zeta function of the braid group, and the Alexander polynomial