

# Toric Topology 2012 in Osaka

Dates: November 16 (Fri) – November 19 (Mon), 2012

Venue: Room 301 of Math. Department in 共通研究棟, Osaka City Univ.

This meeting is an activity of the bilateral program between Japan and Russia:

“Topology and geometry of torus actions and combinatorics of orbit quotients”

## Program

November 16 (Fri)

9 : 30 ~ 10 : 20 Zhi Lü (Fudan Univ.)

On the lifting problem from small covers to quasitoric manifolds

10 : 50 ~ 11 : 40 Yukiko Fukukawa (Osaka City Univ.)

The ring structure of the cohomology ring of the Peterson variety

12 : 00 ~ 12 : 30 Miho Hatanaka (Osaka City Univ.)

The uniqueness of decompositions of a (quasi)toric manifold into products of real 2 or 4 dimensional (quasi)toric manifolds

3 : 30 ~ 4 : 20 Yuriko Umemoto (Osaka City Univ.)

On the growth functions of hyperbolic Coxeter groups

4 : 50 ~ 5 : 40 Seonjeong Park (KAIST)

Strong cohomological rigidity problems for projective bundles over a quasitoric manifold

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November 17 (Sat)

9 : 10 ~ 10 : 00 Satoshi Murai (Yamaguchi Univ.)

Stacked triangulations and face numbers

10 : 30 ~ 11 : 20 Yury Ustinovsky (Steklov Institute)

Complex geometry of moment-angle-manifolds

11 : 50 ~ 12 : 40 Hiroaki Ishida (OCAMI)

Complex manifolds with maximal torus actions

2 : 30 ~ 3 : 20 Ivan Limonchenko (Moscow State Univ.)

Nontrivial torsion in cohomology rings of some moment-angle manifolds

3 : 50 ~ 4 : 40 Daisuke Kishimoto (Kyoto Univ.)

The conjecture of Bahri, Bendersky, Cohen and Gitler on polyhedral products

5 : 10 ~ 6 : 00 Taras Panov (Moscow State Univ.)

Moment-angle complexes corresponding to chordal graphs

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November 18 (Sun)

- 9 : 10 ~ 10 : 00 Yi Sun (Fudan Univ.)  
Buchstaber invariant of universal complexes
- 10 : 30 ~ 11 : 20 Anton Ayzenberg (Moscow State Univ.)  
Polyhedral joins and products
- 11 : 50 ~ 12 : 40 Li Yu (Nanjing Univ.)  
Free  $\mathbb{Z}_p$ -torus actions in dimension 2 and 3
- 2 : 30 ~ 3 : 20 Yoshinobu Kamishima (Toyko Metropolitan Univ.)  
On the holomorphic torus-Bott tower of aspherical manifolds
- 3 : 50 ~ 4 : 40 Takashi Sato (Kyoto Univ.)  
The cohomology ring of the GKM graph of the flag manifold of type  $F_4$
- 5 : 10 ~ 6 : 00 Shizuo Kaji (Yamaguchi Univ.)  
Cohomology of a GKM-graph with symmetry

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November 19 (Mon)

- 9 : 10 ~ 10 : 00 Hanchul Park (Ajou Univ.)  
A new graph invariant arises in toric topology
- 10 : 30 ~ 11 : 20 Choi Suyoung (Ajou Univ.)  
On the toric rigidity of simple polytopes
- 11 : 50 ~ 12 : 40 Akihiro Higashitani (Osaka Univ.)  
Edge contractions and minimal flag simplicial spheres
- 2 : 30 ~ 3 : 20 Soumen Sarker (KAIST)  
On equivariant cobordism of lens spaces
- 3 : 50 ~ 4 : 40 Tomoo Matsumura (KAIST)  
Schubert Calculus of Weighted Grassmannians

Organizer: Mikiya Masuda (Osaka City Univ.)