

## List of achievements

Shintarô Kuroki

### 1. Theses

- (1) Shintarô Kuroki: Classification of Transformation groups, Ph.D Thesis in Osaka City University, pp90 (2006).
- (2) Shintarô Kuroki: Research on Toric Topology, Postdoctor Research Working Report in Fudan University, pp131 (2009).

### 2. Accepted papers and proceedings (refereed)

- (3) Shintarô Kuroki: *On the construction of smooth  $SL(m, \mathbb{H}) \times SL(n, \mathbb{H})$ -actions on  $S^{4(m+n)-1}$* , Bull. Yamagata U., Yamagata, Japan (Natural Science) Vol. **15**, No. 3 Feb., 49–59 (2003).
- (4) Shintarô Kuroki: *On  $SL(3, \mathbb{R})$ -action on 4-sphere*, J. of Fundamental and Applied Math. **11**, no. 5, 99–105 (2005)., translation in J. of Math. Sci. (N.Y.) **146**, no. 1, 5518–5522 (2007).
- (5) Shintarô Kuroki: *Classification of compact transformation groups on complex quadrics with codimension one orbits*, Osaka J. Math. Vol. **46**, no. 1, 21–85 (2009).
- (6) Shintarô Kuroki: *Characterization of homogeneous torus manifolds*, Osaka J. Math. Vol. **47**, no. 1, 285–299 (2010).
- (7) Shintarô Kuroki: *Operations on three dimensional small covers*, Chin. Ann. Math. **31** B (3), 393–410 (2010).
- (8) Shintarô Kuroki: *On projective bundles over small covers (a survey)*, GROUP ACTIONS AND HOMOGENEOUS SPACES. Proceedings of the International Conference Bratislava Topology Symposium "Group Actions and Homogeneous Spaces", September 7-11, 2009, Comenius University, Bratislava, Slovakia, 2009, 43–60 (2010).
- (9) Shintarô Kuroki: *Classification of torus manifolds with codimension one extended actions*, to appear in Transformation Groups; OCAMI Preprint Series 10-16.

### 3. Preprints

#### 3.1. Submitted.

- (10) Suyoung Choi and Shintarô Kuroki: *Topological classification of torus manifolds which have codimension one extended actions*, OCAMI Preprint Series 09-9.
- (11) Shintarô Kuroki: *Equivariant cohomology distinguishes geometric structures of toric hyperKähler manifolds*, OCAMI Preprint Series 10-18.

### 3.2. In preparation.

- (12) Shintarô Kuroki *Cohomological rigidity of toric hyperKähler manifolds*.
- (13) Shintarô Kuroki and Zhi Lü: *On projective bundles over small covers*.
- (14) Shintarô Kuroki: *Hypertorus graphs and graph equivariant cohomologies*.
- (15) Shintarô Kuroki: *On topological generalization of hypertoric manifolds*.
- (16) Shintarô Kuroki: *GKM manifolds with large symmetries and their GKM graphs*.
- (17) Shintarô Kuroki and DongYoup Suh: *(Equivariant) cohomological rigidity of 6-dimensional CP-towers with GKM torus action*.

### 4. Non-refereed papers and proceedings

- (18) Shintarô Kuroki: *Classification of compact transformation groups on complex quadrics with codimension one orbits*, RIMS kokyuroku **1343**, 10–24 (2003).
- (19) Shintarô Kuroki: *On the  $SL(3, \mathbb{R})$ -action on 4-sphere*, RIMS kokyuroku **1393**, 79–81 (2004).
- (20) Shintarô Kuroki: *Classification of compact transformation groups on complex quadrics with codimension one orbits* (Japanese), the 2nd Kinosaki sinjin seminar proceedings 256–261 (2005).
- (21) Shintarô Kuroki: *Hypertorus graph and its equivariant cohomology* (Japanese), RIMS kokyuroku **1517**, 120–135 (2006).
- (22) Shintarô Kuroki: *Classification of compact group actions on torus manifolds which have codimension 0 or 1 orbits* (Japanese), Hokkaido university Technical report series in Math., Series #**117** The 3rd COE Conference for Young Researchers -CCYR3-, 177–184 (2007).
- (23) Shintarô Kuroki: *On transformation groups which act on torus manifolds*, Proc. of 34th Symposium on Transformation Groups, 10–26 (2007).
- (24) Shintarô Kuroki: *On transformation groups which act on torus manifolds* (Japanese), RIMS kokyuroku **1540**, 67–78 (2007).
- (25) Shintarô Kuroki: *On 8-manifolds with  $SU(3)$ -actions*, RIMS kokyuroku **1569**, 81–93 (2007).
- (26) Shintarô Kuroki: *Remarks on McGavran’s paper and Nishimura’s result*, Trends in Math. Vol. **10** No. 1, 77–79 (2008).
- (27) Shintarô Kuroki: *Equivariant cohomology determines hypertoric manifold*, RIMS kokyuroku **1670**, 107–116 (2009).
- (28) Shintarô Kuroki: *Introduction to GKM theory*, Trends in Math. Vol. **11** No. 2, 85–102 (2009).
- (29) Shintarô Kuroki: *On group actions with codimension one orbits* (Japanese), Proceedings of 57th Topology Symposium, 13–22 (2010).
- (30) Shintarô Kuroki: *GKM graphs induced by GKM manifolds with  $SU(\ell + 1)$ -symmetries*, Trends in Math. Vol. **12** No. 1, 103–113 (2010).
- (31) Shintarô Kuroki: *A topological definition of hypertoric manifolds and its equivariant cohomology*, Trends in Math. Vol. **12** No. 1, 135–138 (2010).

### 5. Others

- (32) Ikumitsu Nagasaki and Shintarô Kuroki (editors): RIMS kokyuroku 1569 “The theory of transformation groups and its applications”, RIMS, Kyoto University, pp179 (2007).
  - (33) (a) Shintarô Kuroki: *Classification of quasitoric manifolds with codimension one extended actions*; OCAMI Preprint Series 09-4, pp31 (2009).
  - (b) Shintarô Kuroki: *Classification of torus manifolds with codimension one extended actions*; OCAMI Preprint Series 09-5, pp46 (2009).
- (In these papers, I gave an alternative proof to the main results in the paper (9).)