# Four Dimensional Topology

November 15 – November 17, 2013 Hiroshima University

### Program

#### November 15 (Fri)

15:00–15:40 Kenta Hayano (Hokkaido University)

Logarithmic transformations and generalized complex structures (joint work with Ryushi Goto)

15:50–16:30 Yoshihiro Fukumoto (Ritsumeikan University)

On negative-definite cobordisms among lens spaces (joint work with Mikio Furuta)

17:00–17:40 Tirasan Khandhawit (Kavli IPMU)

Manolescu-Floer spectra for Seiberg-Witten monopoles

17:50–18:30 Shigeru Takamura (Kyoto University)

Higher-dimensional torus knots, vanishing cycles and uniformization of singularities

18:40–19:00 Ryota Hirakawa (Kyoto University)

Classification of degenerations of Riemann surfaces associated with regular polyhedra

#### November 16 (Sat)

09:40–10:20 Takefumi Nosaka (Kyushu University)

Bilinear-form invariants of Hurwitz equivalence classes

10:30–11:10 Hirofumi Sasahira (Nagoya University)

Gluing formula for refined Seiberg-Witten invariant along 3-manifolds with  $b_1 = 1$ 

11:40–12:20 Kazuto Takao (Hiroshima University)

Kirby calculus and singularities of product maps

14:00–14:50 Mikio Furuta (University of Tokyo)

On Manolescu's work on the triangulation conjecture

15:00–15:40 Mikio Furuta (University of Tokyo)

Pin(2) equivariant Seiberg-Witten Floer K group as TQFT

16:10–16:50 Akio Kawauchi (Osaka City University)

Splitting a 4-manifold with infinite cyclic fundamental group, revised

17:00–17:30 Ryoma Kobayashi (Tokyo University of Science)

Lefschetz fibrations and finitely presented groups

17:50–18:20 Kengo Kawamura (Osaka City University)

On relationship between seven types of Roseman moves

18:30–19:00 Sosuke Ashihara (Hiroshima University)

Ribbon torus-knots with the isomorphic fundamental quandles have the isomorphic fundamental biquandles

## November 17 (Sun)

09:40–10:20 Kokoro Tanaka (Tokyo Gakugei University)

Regular-equivalence of 2-knot diagrams and sphere eversions (joint work with Masamichi Takase)

10:30–10:50 Kouki Sato (Tokyo Gakugei University)

Nonorientable genus of a knot in punctured  $CP^2$  (joint work with Motoo Tange)

11:00–11:20 Shumi Kinjo (Shinshu University)

Immersions of 3-sphere into 4-space associated with Dynkin diagrams of types A and D

11:50–12:30 Takao Matumoto (Kyoto University, Hiroshima University)

On the smooth unknotting conjecture in dimension four IX

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