

# Four Dimensional Topology

November 21 – November 23, 2014  
Osaka City University

## Program

### November 21 (Fri)

13:30–14:10 Akio Kawauchi (Osaka City University)

Smooth unknotting of a ribbon surface-knot

14:30–15:10 Nafaa Chbili (United Arab Emirates University)

The polynomial invariants of Quasi-Alternating links (joint work with K. Qazaqzeh)

15:30–16:10 Shigeru Takamura (Kyoto University)

Group actions, regular polyhedra, and quotient families

16:20–16:40 Ryota Hirakawa (Kyoto University)

Regular polyhedra and complex surfaces

16:50–17:20 Shota Murakami (Keio University)

Deformation equivalence classes of surfaces with the first Betti number one, and the second Betti number zero

17:30–18:00 Kengo Kawamura (Osaka City University)

On ribbon-clasp 2-knots (joint work with Seiichi Kamada)

### November 22 (Sat)

09:30–10:10 Kenta Hayano (Hokkaido University)

Multisections of Lefschetz fibrations and topology of symplectic 4-manifolds (joint work with Refik Inanc Baykur)

10:30–11:10 Noriyuki Hamada (The University of Tokyo)

On sections of the Matsumoto-Cadauid-Korkmaz Lefschetz fibration

11:30–12:00 Takuya Ukida (Tokyo Institute of Technology)

A genus zero Lefschetz fibration on the Akbulut cork and exotic pairs

12:10–12:30 Takahiro Oba (Tokyo Institute of Technology)

Stein fillings of homology spheres and mapping class groups

14:00–14:40 Daniele Zuddas (Korea Institute for Advanced Study)

Topological 4-manifolds as branched covers of  $S^4$

15:00–15:40 Nobuhiro Nakamura (Gakushuin university)

$Pin(2)$ -monopole equations and Yamabe invariants (joint work with Masashi Ishida and Shinichiro Matsuo)

16:00–16:40 Yuichi Yamada (The Univ. of Electro-Comm.)

4-manifolds constructed by pairs of lens space surgeries (joint work with Motoo Tange)

17:10–17:30 Masatsuna Tsuchiya (Gakushuin University)

On homology 3-spheres defined by two knots

17:40–18:00 Kouki Sato (Tokyo Gakugei University)

Non-orientable genus of knots in punctured Spin 4-manifolds

### November 23 (Sun)

09:30–10:10 Motoo Tange (University of Tsukuba)

Definite even 4-manifolds bounding homology spheres

10:30–11:10 Yasuyoshi Tsutsumi (Oshima National College of Maritime Technology)

Negativity of the third Ohtsuki invariants of the Brieskorn-Hamm homology 3-spheres

11:30–12:10 Takayuki Okuda (Kyushu University)

Splitting of singular fibers in barking families

13:30–14:10 Tetsuya Abe (Tokyo Institute of Technology)

Annulus twist and diffeomorphic 4-manifolds II (joint work with In Dae Jong, John Luecke and John Osoinach)

14:30–15:00 Takao Matumoto (Kyoto University)

On the smooth unknotting conjecture in dimension four X

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