

Four Dimensional Topology

September 6 – September 10, 2018

Room E408, Department of Mathematics, Osaka City University

Program

September 6 (Thur.)

13:00–13:10 Opening Remark

13:10–13:50 Scott Carter (University of South Alabama)

The language of surfaces

14:30–14:50 Dale Koenig (Okinawa Institute of Science and Technology)

3-manifolds in trisected 4-manifolds

14:55–15:15 Yuichi Yamada (The University of Electro-Communications)

Exceptional Dehn surgeries along certain two-component links related to 4-manifolds

15:20–15:40 Tetsuya Abe (Ritsumeikan University)

How to calculate the enhancement to the Milnor number for fibered links

(joint work with Keiji Tagami (Tokyo University of Science))

16:10–16:30 Tetsuya Ito (Kyoto University)

Strongly quasipositive and quasipositive links and the defect of Bennequin's inequality

(joint work with Keiko Kawamuro (Univ. Iowa) and Jesse Hamer (Univ. Iowa))

16:35–16:55 Keiko Kawamuro (University of Iowa)

The fractional Dehn twist coefficients and branched coverings

(joint work with Tetsuya Ito (Kyoto University))

17:00–17:20 Takahiro Oba (Kyoto University)

Surfaces in D^4 with the same boundary and fundamental group

September 7 (Fri.)

09:30–10:10 Osamu Saeki (Kyushu University)

Simplifying broken Lefschetz fibrations and trisections of 4-manifolds

(joint work with R. İnanç Baykur (University of Massachusetts))

10:20–11:00 Selman Akbulut (Michigan State University)

A simple family of infinitely many absolutely exotic manifolds

13:00–13:20 Shin Satoh (Kobe University)

The n -cable of a ribbon 2-knot

13:25–13:45 Jieon Kim (Pusan National University)

Biquasile colorings of oriented surface-links

(joint work with Sam Nelson (Claremont McKenna College))

13:50–14:10 Sang Youl Lee (Pusan National University)

On invariants for surface-links via quandle cocycle invariants for classical links

14:30–14:50 Ki-Heon Yun (Sungshin Women's University)

On the minimal number of singular fibers in Lefschetz fibrations over the torus

14:55–15:15 Hironobu Naoe (Tohoku University)

Closed 4-manifolds with shadow-complexity one

(joint work with Yuya Koda (Hiroshima University) and Bruno Martelli (The University of Pisa))

15:20–15:40 Eylem Zeliha Yildiz (Michigan State University)

Knot concordance in 3-manifolds

16:10–16:30 Akiko Shima (Tokai University)

The structure of a minimal n -chart with two crossings

(joint work with Teruo Nagase (Tokai University))

16:35–16:55 Sukuse Abe (Osaka City University)

Relations between quandle shadow cocycle invariants and vassiliev invariants

17:00–17:20 Mizuki Fukuda (Tohoku University)

On the Gluck twist along branched twist spins

18:00–20:00 Banquet

September 8 (Sat.)

09:30–10:10 Riccardo Piergallini (Università di Camerino)

Four-manifolds as branched covers

10:20–10:40 Ash Lightfoot (NRU Higher School of Economics, Moscow)

Link homotopy in 4-space via chart descriptions

Excursion or Free Discussion

September 9 (Sun.)

09:30–10:10 Mark Hughes (Brigham Young University)

Braided surfaces with caps and positive branch points

10:20–11:00 Seichi Kamada (Osaka City University)

On surfaces immersed in 4-space

13:00–13:20 Hokuto Konno (The University of Tokyo)

A family version of the Bauer-Furuta invariant and the complex of surfaces

13:25–13:45 Kouichi Yasui (Osaka University)

Geometrically simply connected 4-manifolds and stable cohomotopy Seiberg-Witten invariants

13:50–14:10 Motoo Tange (University of Tsukuba)

On ribbon disks in handle decompositions

14:30–14:50 Kenjiro Sasaki (Kyoto University)

Canonical representations and the universal families of Riemann surfaces

14:55–15:15 Shigeru Takamura (Kyoto University)

Quotient families and their applications

15:20–15:40 Naoki Kitazawa (Kyushu University)

4-manifolds admitting special generic maps into the 3-dimensional Euclidean space

16:10–16:30 Kengo Kawamura (Osaka City University)

A generating set of oriented Roseman moves

16:35–16:55 Inasa Nakamura (Kanazawa University)

Simplifying numbers of branched covering surface-knots

September 10 (Mon.)

09:30–10:10 Kent Orr (Indiana University)

New Perspectives on an Old Problem of Milnor
(joint work with Jae Choon Cha (Postech University))

10:20–11:00 Jongil Park (Seoul National University)

On symplectic fillings of a quotient surface singularity

11:00–11:10 Closing

Note. The following talk was canceled due to a big typhoon.

Sudipta Kolay (Georgia Tech)

Braided Embeddings

Organizers: Seiichi Kamada, Kouichi Yasui, Takao Matumoto and Kengo Kawamura

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