

Workshop Topology and Computer 2019

Date: October 18 – 20, 2019

Venue: Osaka City University, Department of Mathematics,
Building E of Faculty of Science, Room E408

Program

October 18 (Fri)

13:30 – 14:10 Masaaki Wada (Osaka University)
Projective Hausdorff measure

14:20 – 14:50 Ken'ichi Yoshida (Saitama University)
Degeneration of hyperbolic cone structures on a link in the thickened torus

15:10 – 15:25 Ryoya Kai (Osaka City University)
Commensurability of non-arithmetic hyperbolic 3-manifolds

15:25 – 15:40 Kaho Mikami (Osaka University)
Longitude for braids

15:50 – 16:20 Nishimura Yuya (Nihon University)
The unknotting problem for diagrams with fixed treewidth

16:30 – 17:00 Shinichi Tajima (Niigata University)
Computing vanishing cycle sheaves –Lê cycles vs holonomic D-modules–
(joint with Yoko Umeta (Josai University))

October 19 (Sat)

9:30 – 10:15 Naoki Sakata (Saitama University)
3D nets, polycontinuous patterns, and handlebody decompositions of 3-manifolds

10:25 – 10:45 Kento Nakamura (Meiji University)
Flower : A flow-based programming environment for kaleidoscope patterns

10:50 – 11:10 Eri Kamikawa (Meiji University)
BeadsKnot~implementation of a knot editor which allows us to draw a Seifert surface

11:20 – 11:50 Tomoshige Yukita (Waseda University)
Local rigidity of hyperbolic right-angled Coxeter groups in dimension 4 and 5

13:00 – 13:45 Yuichi Kabaya (Kitami Institute of Technology)
Visualizing deformations of complex projective structures

13:55 – 14:25 Yoshiro Yaguchi (National Institute of Technology, Gunma College)
Hurwitz action of braid group and its applications to key exchange

14:35 – 14:55 Kazushi Ahara (Meiji University)
PointLine Hyperbolic: A Construction Tool of Hyperbolic Geometry Without Concept of Construction Procedures.

15:15 – 16:00 Ser Peow Tan (National University of Singapore)
Hyperbolic jigsaws and families of pseudomodular groups

16:10 – 16:40 Kazunori Iwaki (Tokyo Institute of Technology)
Cappell-Shaneson homotopy 4-spheres and number theory

16:50 – 17:20 Takeyoshi Kogiso (Josai University)
 q -Deformations of continued fractions and Knot polynomials

October 20 (Sun)

9:30 – 10:00 Jun Yoshida (University of Tokyo)
Computing cycles in Khovanov homology

10:10 – 10:40 Taketo Sano (University of Tokyo)
Direct computation of Khovanov homology and grid homology

10:50 – 11:20 Toshifumi Tanaka (Gifu University)
On satellite knots with symmetric union presentations

11:30 – 12:15 Toshio Sumi (Kyushu University)
Group actions and representations