

First KOOK Seminar International for Knot Theory and Related Topics

[chairperson]

9 July FRIDAY

09:00–09:40 Seiichi Kamada (Hiroshima University) [J. Scott Carter]
Graphic calculus of monodromy representations of topological objects

10:00–10:40 David Gabai (Princeton University) [Martin Bridson]
(a joint work with Danny Calegari)
Ends of Hyperbolic 3-Manifolds

Coffee Break

11:20–12:00 Boju Jiang (Peking University) [Daniel S. Silver]
Nielsen theory and braids

Lunch

14:00–14:40 Mario Eudavez-Muñoz (Universidad Nacional Autonoma de Mexico) [Cameron Gordon]
(a joint work with Max Neumann-Coto)
Acyindrical surfaces in knot complements

Coffee Break

15:10–15:50 Bruno Zimmermann (Universite degli Studi Trieste) [Makoto Sakuma]
Finite group actions on homology 3-spheres and cyclic branched coverings of knots and links

16:10–16:50 Martin Bridson (Imperial College London) [Yo'av Rieck]
The geometry and complexity of balanced group presentations

10 July SATURDAY

09:00–09:40 Tomotada Ohtsuki (RIMS, Kyoto University) [Akio Kawauchi]
The 2-loop polynomial for knots of genus 1

10:00–10:40 Cameron Gordon (University of Texas at Austin) [Mario Eudavez-Muñoz]
Doubly composite knots with unknotting number 1

Coffee Break

11:20–12:00 Danny Calegari (California Institute Technology) [Bruno Zimmermann]
The Euler class of groups acting on the plane

Lunch

14:00–14:20 14:30–14:50 parallel talks

Room 1 [Sungbok Hong]

Ruslan N. Shmatkov (Novosibirsk State University)
The uniqueness theorem for Euclidean two-bridge knot cone-manifolds
Mattia Mecchia (Università degli studi di Trieste)
On finite nonsolvable groups acting on homology spheres

Room 2 [Tomotada Ohtsuki]

Andrew Krickner (University of Toronto)
Wheeling and the non-commutative Weil complex
Taizo Kanenobu (Osaka City University)
The first four terms of Kauffman's link polynomial

Room 3 [Kimihiko Motegi]

Kazuhiro Ichihara (Osaka Sangyo University)
Distances between boundary slopes of immersed essential surfaces
Toshio Saito (Osaka University)
Dehn surgery and $(1, 1)$ -knots in lens spaces

Coffee Break

15:30–15:50 16:00–16:20 16:30–16:50 parallel talks

Room 1 [Makoto Sakuma]

Alexander Mednykh (Novosibirsk State University)
Geometry of knots and links
Yo'av Rieck (University of Arkansas)
(a joint work with Chaim Goodman–Strauss)
Simple geodesic on hyperbolic punctured torus
Hirotaka Akiyoshi (Osaka University)
Punctured torus groups surviving surgery

Room 2 [Boju Jiang]

Jin-Hong Kim (Korea Advanced Institute of Science and Technology)
Tight contact structures of some Seifert 3-manifolds
Eiko Kin (Kyoto University)
(a joint work with K. Ichihara and K. Motegi)
Pseudo-Anosov braids on the 2-sphere
Ryosuke Yamamoto (Osaka University)
On the tightness of contact structures and Dehn surgery along transverse links

Room 3 [Yasutaka Nakanishi]

Koya Shimokawa (Saitama University)
Tangle sum and constructible spheres
Takuji Nakamura (Osaka City University)
Braidzel surfaces for links
Ikuo Tayama (Osaka City University)
(a joint work with Akio Kawachi (Osaka City University))
Enumerating the prime knots and links by a canonical order II

11 July SUNDAY

Excursion

12 July MONDAY

09:00–09:40 Peter Ozsvath (Columbia University) [Akio Kawauchi]
T.B.A.

10:00–10:40 Sungbok Hong (Korea University) [Danny Calegari]
(a joint work with Darryl McCullough and Hyam Rubinstein)
The Smale conjecture for lens spaces

Coffee Break

11:20–12:00 Daniel S. Silver (University of South Alabama) [Eriko Hironaka]
(a joint work with Susan G. Williams (University of South Alabama))
Knots, links and Lehmer's question

Lunch

14:00–14:20 14:30–14:50 parallel talks

Room 1 [Taizo Kanenobu]

Yongju Bae (Kyungpook National University)
On the z -degree of the Kauffman polynomials via a tangle decomposition
Alexander Stoimenow (University of Toronto)
On mutations and Vassiliev invariants (not) contained in knot polynomials

Room 2 [Yoshiyuki Ohyama]

Makiko Ishiwata (Tokyo Woman's Christian University)
(a joint work with Mieczyslaw Dabkowski (University of Texas at Dallas), Jozef H. Przytycki (George Washington University), Akira Yasuhara (Tokyo Gakugei University))
Rotation and signature invariants
Fumikazu Nagasato (Kyushu University)
(a joint work with Răzvan Gelca (Texas Tech University))
Some results about the Kauffman bracket skein module of the twist knot exterior

Room 3 [Yasutaka Nakanishi]

Ryo Nikkuni (Waseda University)
Completely distinguishable projections of spatial graphs
Miyuki Okamoto (Nippon Institute of Technology)
(A joint work with Kazuaki Kobayashi (Tokyo Woman's Christian University))
On the complete list of T -minimal graphs up to 9 vertices

Coffee Break

15:30–15:50 16:00–16:20 16:30–16:50 parallel talks

Room 1 [Akio Kawauchi]

Chan-Young Park (Kyungpook National University)
(a joint work with Myeong-Ju Jeong and Younhee Choi)
Twist of knots and the Q -polynomial

Rama Mishra (Indian Institute of Technology)
Polynomial knots and singularities

Naoko Kamada (Osaka City University)
On Miyazawa's invariants for virtual links

Room 2 [Taizo Kanenobu]

Tsuyoshi Sakai (Nihon University)
On the Jones polynomials of 6_1 -like ribbon knots

Yoko Mizuma (University of Tokyo)
On ribbon number of the Kinoshita-Terasaka knot

Saul Schleimer (University of Illinois at Chicago)
Sphere recognition lies in NP

Room 3 [Yoshiaki Uchida]

Yoshiyuki Ohyama (Tokyo Woman's Christian University)
(a joint work with Yasutaka Nakanishi (Kobe University))
Knots with given finite type invariants and Conway polynomial

Haruko Aida Miyazawa (Tuda College)
A group of links and Vassiliev invariants

Yukihiro Tsutsumi (Sophia University)
On knots with trivial Alexander polynomial and the cyclic branched covers

13 July TUESDAY

10:00–10:40 J. Scott Carter (University of South Alabama) [Seiichi Kamada]
and Masahico Saito (University of South Florida)
Quandle homology theories, set-theoretic Yang-Baxter equations, and topological applications

Coffee Break

11:20–12:00 J. Hyam Rubinstein (University of Melbourne) [David Gabai]
(a joint work with Ensil Kang (Chosun University))
Ideal triangulations - geometric structures and proper essential surfaces

Lunch

14:00–14:20 14:30–14:50 parallel talks

Room 1 [J. Hyam Rubinstein]

Daniel Matignon (Universite de Provence)
(a joint work with Nabil Sayari (Moncton Univ))
Producing Klein bottles by two distinct Dehn fillings

Thomas W. Mattman (California State University, Chico)
Boundary slopes (nearly) bound cyclic slopes

Room 2 [Masahico Saito]

Tsukasa Yashiro (Osaka City University)
Deformations of surface diagrams

Ichiro Torisu (Akita University)
On strongly n -trivial links

Coffee Break

15:30–15:50 16:00–16:20 16:30–16:50 parallel talks

Room 1 [Yo'av Rieck]

Kimihiko Motegi (Nihon University)
(a joint work with Kazuhiro Ichihara (Osaka Sangyo University))
Automorphisms of surfaces and Seifert fibered surgeries on fibered knots

Masakazu Teragaito (Hiroshima University)
Distance between toroidal surgeries on hyperbolic knots in the 3-sphere

Teruhisa Kadokami (Osaka City University)
(a joint work with Yuichi Yamada (The University of Electro-Communications))
Reidemeister torsion and lens surgeries on $(-2, m, n)$ -pretzel knots

Room 2 [Kanji Morimoto]

Tatsuya Tsukamoto (Waseda University)
(a joint work with Akira Yasuhara (Tokyo Gakugei University))
A factorization of the Conway polynomial and covering linkage invariants

Mikami Hirasawa (Gakushuin University)
(a joint work with Kunio Murasugi (University of Toronto))
Genus and fiberedness of Montesinos knots

Daniel J. Heath (Pacific Lutheran University)
On locally thin position