

Topology Project Tohoku Knot Seminar 2025

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Jointly held by

- Mathematical Science Center for Co-creative Society (MathCCS), Tohoku University
- Tohoku Forum for Creativity (TFC), Tohoku University

Date : Friday, October 17 – Sunday, October 19, 2025
Venue : TOKYO ELECTRON House of Creativity 3F, Lecture Theater,
Katahira Campus, Tohoku University
Web : <http://www.math.akita-u.ac.jp/tms2025/>

Programme

October 17 (Fri.)

- 13:30~14:00 Sohei Tateno (Nagoya University)
An analogue of non-commutative Iwasawa theory for fibered knots
- 14:10~14:40 Hisatoshi Kodani (Institute of Mathematics for Industry, Kyushu University)
Kontsevich invariant and Galois action for 2-component string links
- 14:50~15:20 Kouta Ishifuji (Yamagata University)
Stability of Khovanov Homology for Garside Elements
- 15:40~16:10 Miora Saito (Department of Mathematics, Ochanomizu University)
On 2-adjacency of 2-bridge links
- 16:20~16:50 Megumi Tasaki (Department of Mathematics, Ochanomizu University)
Bounds on the area of celtic knots
- 17:00~17:30 Mizuki Kikuya (Department of Mathematics, Ochanomizu University)
Construction and Characterization of Polyhedral Links

October 18 (Sat.)

- 9:20 ~ 9:50 Nobuo Iida (Tokyo Woman's Christian University)
On the slice-torus invariant q_M from Z_2 equivariant Seiberg-Witten theory
- 10:00~10:30 Yukihiro Okamoto (Tokyo Metropolitan University)
On knot types of clean Lagrangian intersections
- 10:50~11:20 Keisuke Himeno (Graduate School of Advanced Science and Engineering, Hiroshima University)
The unoriented band unknotting number of torus knots
- 11:30~12:00 Yuya Kodama (Kagoshima University)
Metrics for quandles

- 13:30~14:00 Yuichiro Iwamoto (Shinshu University)
Generating sets of Reidemeister moves
- 14:10~14:40 Tetsuya Ito (Kyoto University)
Ma-Qiu index in knot theory
- 14:50~15:20 Teruhisa Kadokami (Kanazawa University)
The half Alexander polynomials of amphicheiral 2-bridge knots
- 15:40~16:10 Takayuki Morifuji (Keio University)
On TAV groups and the TAV order function of knots
- 16:20~16:50 Kazuhiro Ichihara (College of Humanities and Sciences, Nihon University)
Degeneracy slopes, boundary slopes and exceptional surgery slopes
- 17:00~17:30 Yoshiaki Uchida (Kobe Pharmaceutical University)
Simple ribbon knots obtained by the product of torus knots
(joint with T. Shibuya(Osaka institute of technology))

October 19 (Sun.)

- 9:20 ~ 9:50 Ayumu Inoue (Tsuda University)
Both of the 2-twist-spun 5_2 -knot and the 4-twist-spun trefoil have the triple point number eight
- 10:00~10:30 Jumpei Yasuda (Osaka Metropolitan University)
Suciu's ribbon knots and their knot quandles
- 10:50~11:20 Naoki Kimura (Tokyo University of Science)
A numerical invariant and Legendrian embeddings of non-intrinsically knotted graphs
- 11:30~12:00 Fukuda Mizuki (Hiroshima University, WPI-SKCM²)
Alexander ideals of branched twist roll spun knots
- 12:10~12:40 Nobutaka Asano (National Institute of Technology, Tsuyama College)
A classification of certain Stein surfaces with genus-2 relative trisections
(joint work with Natsuya Takahashi(The University of Osaka))

Organizers:

Yasuharu Nakae (Akita University)
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Megumi Hashizume (Akita University)
Hiroshi Matsuda (Yamagata University)
Sonia Mahmoudi (Tohoku University)