

## The 3rd East Asian School of Knots, Links and Related Topics

speaker affiliation [chairperson]  
talk-title

### 5 February MONDAY

09:45–10:00 Opening Speech

10:00–10:50 Masakazu Teragaito (Hiroshima University) [Mitsuyoshi Kato]  
*A Seifert fibered manifold with infinitely many knot-surgery descriptions*

11:05–11:55 Ni, Yi (Princeton University) [Ki Hyoung Ko]  
*Knot Floer homology detects fibred knots*

12:10–13:00 Sang Jin Lee (Konkuk University) [Scicheng Wang]  
*Properties of translation numbers in Garside groups*

*Lunch*

ROOM 1 [Scicheng Wang]

15:00–15:20 Yong Ju Bae (Kyungpook National University)  
*On the presentation of links as a sum of two descending tangles*  
(Joint work with In Sook Lee and Sowon Kim)

15:30–15:50 InDae Jong (Osaka City University)  
*On Alexander Polynomials of Special Alternating Links*

16:05–16:25 Toshifumi Tanaka (Osaka City University)  
*The kinkiness of knots and smooth four-manifolds*

16:35–16:55 Seo Jung Park (KAIST)  
*Quadrisecants of hexagonal trefoil knot*

17:10–17:30 Alexander Stoimenow (Kyoto University)  
*Alexander polynomials, minimal genus, and fibering of arborescent links*

17:40–18:00 Shigekazu Nakabo (Kurume National College of Technology)  
 *$Q$ -polynomial of 2-bridge links in terms of Chebyshev polynomials*

18:10–18:30 Myoungsoo Seo (Pusan National University)  
*Casson knot invariants of periodic knots with rational quotients*  
(Joint work with Hee Jeong Jang and Sang Youl Lee)

ROOM 2 [Ki Hyoung Ko]

15:00–15:20 Ryo Nikkuni (Kanazawa University)  
*Symmetries of spatial graphs and Simon invariants*  
(Joint work with Kouki Taniyama)

15:30–15:50 Choon Bae Jeon (Daeduk College)  
*Knots and links in linear embeddings of  $K_6$*   
(Joint work with Youngsik Huh)

16:05–16:25 Young Sik Huh (Hanyang University)  
*Projections of bouquet graph with two cycles*

16:35–16:55 Qin, Jiahu (Heilongjiang University)  
*Triangle-Y exchanges on intrinsic knotting of almost complete partite graphs*

17:10–17:30 Toshie Takata (Niigata University)  
*On the set of the logarithm of the LMO invariant for integral homology 3-spheres*

17:40–18:00 Dongseok Kim (Yeungnam University)  
*Representation theory of quantum Lie algebras and their link invariants*

18:10–18:30 Fumikazu Nagasato (Tokyo Institute of Technology)  
*Algebraic varieties via the Kauffman bracket skein module*

ROOM 3 [Mitsuyoshi Kato]

15:00–15:20 Zhang, Mingxing (Dalian University of Technology)

*Handle additions on simple manifolds*

(Joint work with Ruifeng Qiu and Yanna Li)

15:30–15:50 Tang, Zizhou (Beijing Normal University)

*Chern-Simons invariants and conformal embedding of 3-manifold*

16:05–16:25 Yasushi Yamashita (Nara Women's University)

*Siskind's conjecture and the growth functions of two bridge link groups*

(Joint work with Yu Fujikawa, Yoshiyuki Nakagawa, and Makoto Tamura)

16:35–16:55 Hiroko Murai (Nara Women's University)

*Gap of codimension one foliations*

17:10–17:30 Yu, Bin (Peking University)

*Smale-Williams type attractors in 3-manifolds*

17:40–18:00 Ikuo Tayama (Osaka City University)

*Enumerating 3-manifolds by a canonical order, II*

(Joint work with Akio Kawauchi)

## 6 February TUESDAY

10:00–10:50 Gyo Taek Jin (KAIST) [Yasutaka Nakanishi]

*Arc index of prime knots up to 11 crossings*

11:05–11:55 Hiroataka Akiyoshi (Osaka City University) [Hiroshi Goda]

*End invariant and Jorgensen's side parameter of the punctured torus groups*

12:10–13:00 Qiu, Ruifeng (Dalian University of Technology) [Masakazu Teragaito]

*Stabilizations and operations of Heegaard splittings*

*Lunch*

ROOM 1 [Yasutaka Nakanishi]

15:00–15:20 Liu, Ximin (Dalian University of Technology)

*Cyclic group actions on elliptic surfaces*

15:30–15:50 Du, Xiaoming (Peking University)

*Mapping Degrees Between  $S^n$  bundles over  $S^2$*

16:05–16:25 Jae Choon Cha (ICU)

*Witt class defect invariants, homology cobordism, and link concordance*

16:35–16:55 Se Goo Kim (Kyoung Hee University)

*Computation of concordance invariants of algebraically slice knots*

17:10–17:30 Akira Yasuhara (Tokyo Gakugei University)

*Claspers and link-homotopy classification of string links*

17:40–18:00 Sumiko Horiuchi (Tokyo Woman's Christian University)

*On a ball in a metric space of knots by delta moves*

18:10–18:30 Tadayuki Watanabe (Kyoto University)

*Higher dimensional claspers and characteristic classes*

ROOM 2 [Makoto Sakuma]

15:00–15:20 Takahiro Kitayama (Tokyo University)

*Refinement of twisted Alexander invariants and sign-determined Reidemeister torsions*

15:30–15:50 Teruaki Kitano (Soka University) and Masaaki Suzuki (Akita University)

*Twisted Alexander polynomial and surjective homomorphisms between knot groups*

16:05–16:25 Yang, Guoqiu (Harbin Institute of Technology)

*On relative Heegaard genus*

16:35–16:55 Hiroshi Goda (Tokyo University of Agriculture and Technology)

*Lefschetz zeta function and some flows associated with circle valued Morse maps on 3-manifolds*  
(Joint work with Hiroshi Matsuda and Andrei Pajitnov)

17:10–17:30 Jung Hoon Lee (Konkuk University)

*Stabilizing Heegaard splittings of composite tunnel number two knots*

17:40–18:00 Sang Yop Lee (Seoul National University)

*Boundary-reducing and toroidal Dehn fillings*

18:10–18:30 Yin, Xunbo (Harbin Institute of Technology)

*On surface of bilongitudinal*

ROOM 3 [Taizo Kanenobu]

15:00–15:20 Won Taek Song (ICU)

*The monoid of singular braids is linear*

15:30–15:50 Jee Hyoun Kim (KAIST)

*When do graph braid groups become right-angled Artin group?*

16:05–16:25 Reiko Shinjyo (Osaka City University)

*An infinite sequence of non-conjugate braids of even braid index*

16:35–16:55 Ryosuke Yamamoto (Osaka City University)

*A complexity of open book decompositions and the arc complex*  
(Joint work with Toshio Saito)

17:10–17:30 Bao, Zhiqiang (Peking University)

*Manifolds associated with  $Z_2$  colored graphs*

17:40–18:00 Gao, Hongzhu (Beijing Normal University)

*The minimal genus problem in rational surfaces*

## 7 February WEDNESDAY

10:00–10:50 Wang, Shicheng (Peking University) [Makoto Sakuma]

*Solenoids in Topology and in Dynamics*

11:00–11:50 Taehee Kim (Konkuk University) [Taizo Kanenobu]

*Twisted Alexander invariants and low-dimensional topology*

12:00–12:50 Yasuyuki Miyazawa (Yamaguchi University) [Kouki Taniyama]

*Virtual links and a multi-variable polynomial invariant*

*Excursion*

## 8 February THURSDAY

10:00–10:50 Jun Murakami (Waseda University) [Rui Feng Qiu]  
*On the colored Alexander polynomials*

11:00–11:50 Zheng, Hao (Zhongshan University) [Gyo Taek Jin]  
*Colored HOMFLY polynomial of torus knots and links*

12:00–12:50 Ki Hyoung Ko (KAIST) [Akio Kawauchi]  
*A polynomial-time solution to the reducibility problem*

*Lunch*

ROOM 1 [Gyo Taek Jin]

15:00–15:20 Zhang, Weiping (Nankai University)  
*On the analytic interpretation of the Alexander polynomial*

15:30–15:50 Teruhisa Kadokami (Osaka City University)  
*Seifert surgery along a knot whose Alexander polynomial is of degree two*

16:05–16:25 Naoko Kamada (Osaka City University)  
*On invariants of twisted links*

16:35–16:55 Yasushi Takeda (Kyushu University)  
*Crossing number and the braid index for a virtual link*

17:05–17:25 Atsushi Ishii (Osaka University)  
*The pole diagram and the Miyazawa polynomial*

ROOM 2 [Rui Feng Qiu]

15:00–15:20 Kazuhiro Ichihara (Osaka Sangyo University)  
*Hyperbolic volumes and pants distances for two-bridge knots*

15:30–15:50 Li, Youlin (Peking University)  
*1-dominations between Montesinos knots*

16:05–16:25 KIMURA Yasto (Tokyo University)  
*Topological characterization of Second Cohomology of Knot Quandle*

16:35–16:55 Sang Youl Lee (Pusan National University)  
*On a construction of invariants of surface links in 4-space*

17:05–17:25 Shin Satoh (Kobe University)  
*On the sheet numbers of surface-knots*

ROOM 3 [Akio Kawauchi]

15:00–15:20 Eon-Kyung Lee (Sejong University)  
*Quasi-flatness of abelian subgroups of Garside groups*

15:30–15:50 Byung Hee An (KAIST)  
*Representations of braid groups on surfaces*

16:05–16:25 Yang, Zhiqing (Dalian University of Technology)  
*On unknotting number of connected sum of  $n$  identical knots*

16:35–16:55 Tomomi Kawamura (Aoyama Gakuin University)  
*An estimate of the Rasmussen invariant for links*

17:05–17:25 Mikami Hirasawa (Nagoya Institute of Technology)  
*When does a satellite knot fiber ?*  
(Joint work with K. Murasugi and D. Silver)

*Farewell Party*