Intelligence of Low Dimensional Topology 2006

July 22 – July 26, 2006

at Hiroshima University, Hiroshima, Japan

PROGRAM

23 July (Sunday)

Morning : ROOM A

9:20– 9:30   Opening

9:30–10:00   Louis H Kauffman (University of Illinois at Chicago)
             Virtual knot theory

10:15–10:45   Tomotada Ohtsuki (RIMS, Kyoto University)
             Equivariant quantum invariants of the infinite cyclic covers of knot complements

11:00–11:30   Vladimir Vershinin (Universite Montpellier II)
             Graphs, braids and Khovanov homology

Afternoon : ROOM A

13:30–13:50   Teruaki Kitano (Soka University) and Masaaki Suzuki (Akita University)
             On the existence of a surjective homomorphism between knot groups

14:00–14:20   Makoto Sakuma(Osaka University)
             Epimorphisms between 2-bridge link groups (joint work with Tomotada Ohtsuki and Robert Riley)

14:30–14:50   Yasushi Kasahara (Kochi University of Technology)
             Remarks on the faithfulness of the Jones representations

15:30–15:50   Ryo Nikkuni (Kanazawa University)
             Achirality of spatial graphs and the Simon invariant

16:00–16:20   Hirotaka Akiyoshi (OCAMI, Osaka City University)
             Ford domain of a certain hyperbolic 3-manifold whose boundary consists of a pair of once-punctured
             tori

16:30–16:50   Yoshikazu Yamaguchi (University of Tokyo)
             Limit values of the non-abelian twisted Reidemeister torsion associated to knots

17:00–17:20   Jean-Baptiste Meilhan (RIMS, Kyoto University)
             Surgery along Brunnian links in 3-manifolds

Afternoon : ROOM B

13:30–13:50   Masayuki Yamasaki (Okayama University of Science)
             Knots and 4-dimensional topological surgery

14:00–14:20   Sang Youl Lee (Pusan National University)
             Invariants of surface links in $\mathbb{R}^4$ via classical link invariants

14:30–14:50   Tsukasa Yashiro (University of Auckland)
             Cell-complexes for surface-knots and surface-knot groups

15:30–15:50   Akio Kawauchi (Osaka City University)
             On the surface-link groups

16:00–16:20   Shin Satoh (Kobe University)
             Sheet numbers and cocycle invariants of surface-knots

16:30–1650   Kouichi Yasui (Osaka University)
             An exotic rational surface without 1- or 3-handles

17:00–17:20   Motoo Tange (Kyoto University)
             On the applications of correction term to lens space

24 July (Monday)

Morning : ROOM A

9:30–10:00   Colin Rourke (University of Warwick)

Extending Markov's Theorem to classify links and 3-manifolds

10:15–10:45   Masanori Morishita (Kyushu University)

Variation of hyperbolic structures (joint work with Y. Terashima)

Afternoon : ROOM A

13:30–13:50   Jun O'Hara (Tokyo Metropolitan University)

The configuration space of a spider

14:00–14:20   Yuya Koda (Keio University)

Strongly-cyclic branched coverings and the Alexander polynomial of knots in rational homology spheres

14:30–14:50   Yukihiro Tsutsumi (Sophia University)

Free genus one knots with large Haken numbers

15:30–15:50   Teruhisa Kadokami (OCAMI, Osaka City University)

Reidemeister torsion and Seifert surgeries on knots in homology 3-spheres

16:00–16:20   Ryosuke Yamamoto (OCAMI, Osaka City University)

Overtwisted open books and Stallings twist

16:30–16:50   Yasuyoshi Tsutsumi (Osaka Institute of Technology)

The Casson-Walker invariant and some strongly periodic link

17:00–17:20   Hiroko Murai (Nara Women's University)

On the construction of the finite depth foliations on the 3-manifolds

Afternoon : ROOM B

13:30–13:50   Taizo Kanenobu (Osaka City University)

Finite type Invariants of order 4 for 2-component links

14:00–14:20   Naoko Kamada (OCAMI, Osaka City University)

Miyazawa polynomials of virtual knots and virtual crossing numbers

14:30–14:50   Atsushi Ishii (Osaka University)

Smoothing resolution for the Alexander-Conway polynomial

15:30–15:50   Kenichi Kawagoe (Kanazawa University)

Limits of the HOMFLY polynomial of the Figure-eight knot

16:00–16:20   Yasuyuki Miyazawa (Yamaguchi University)

The Yamada polynomial for virtual graphs

16:30–16:50   Seiichi Kamada (Hiroshima University)

Quandles with good involutions, their homologies and knot invariants

17:00–17:20   Walter Neumann (Columbia University)

Complex analytic realization of links (joint work with Anne Pichon)

25 July (Tuesday)

Morning : ROOM A

9:30–10:00   J. Scott Carter and Masahico Saito (University of South Alabama and University of South Florida)
Cohomology of categorical self-distributivity

10:15–10:45   Gyo Taek Jin (Korea Advanced Institute of Science and Technology)
Prime knots with arc index up to 10

11:00–11:30   Toshitake Kohno (The University of Tokyo)
Hyperbolic volume functions and iterated integrals

Afternoon : ROOM A

13:30–13:50   Hiroshi Goda (Tokyo University of Agriculture and Technology)
Some estimates of Morse-Novikov number of knots and links

14:00–14:20   Thomas Fleming (University of California San Diego) and Akira Yasuhara (Tokyo Gakugei University)
Milnor's Isotopy Invariants and Generalized Link Homotopy

14:30–14:50   Nafaa Chbili (OCAMI, Osaka City University and Monastir University)
Toward an equivariant Khovanov homology

15:30–15:50   Alexander Stoimenow (RIMS, Kyoto University)
Mutation and the colored Jones polynomial (joint work with Toshifumi Tanaka)

16:00–16:20   Ikuo Tayama (OCAMI, Osaka City University)
Enumerating 3−manifolds by a canonical order

16:30–16:50   Takuya Sakasai (University of Tokyo)
Higher-order Alexander invariants for homology cobordisms of a surface

16:55–17:00   Closing

Afternoon : ROOM B

13:30–13:50   Tomomi Kawamura (Aoyama Gakuin University)
Various Bennequin inequalities on link invariants

14:00–14:20   Mikami Hirasawa (Gakushuin University)
Obtaining string-minizing, length-minimizing braid words or 2-bridge links

14:30–14:50   Reiko Shinjo (OCAMI, Osaka City University)
An infinite sequence of non conjugate 4-braids representing the same knot of braid index 4

15:30–15:50   Keiko Kawamuro (Columbia University)
The algebraic crossing number and the braid index of knots and links

16:00–16:20   Masahide Iwakiri (Hiroshima University)
Quandle cocycle invariants of torus links

16:30–16:50   Kokoro Tanaka (University of Tokyo)
A note on C1-moves