Program

Friday 21 August

(Every talk is expected to be of 15 minute length.)

9:15–9:30 Opening

9:30–11:00 Chairperson: Hung Hwan Lee

- 1. Kayo Yoshida (Osaka City University, M2) On a mathematical model of prion proteins
- 2. Hye Jin Yoon (Kyungpook National University, M2) On the Bollobás-Riordan polynomial of covering ribbon graphs
- 3. Hitoshi Yamanaka (Osaka City University, D1) On invariant Morse functions
- 4. Yoshiro Yaguchi (Hiroshima University, D2) On BC-equivalence between two tuples of the standard generators of braid group
- 5. Seung Yeop Yang (Kyungpook National University, M1) On the HOMFLY-PT Polynomial of a link with local symmetry

11:00–12:30 Chairperson: Donghi Lee

6. Yuriko Umemoto (Osaka City University, M1) On paradoxical decompositions

7. Akinobu Uegaki (Osaka City University, M2) Reverse Hölder inequality for the first eigenfunction of the N-Laplacian

8. Kiyoki Tanaka (Osaka City University, M2) Toeplitz operators and estimates of the harmonic Bergman Kernel on smooth bounded domains

- 9. Mihwa Shin (Pusan National University, D1) Welded links and Miyazawa polynomials
- 10. Ayaka Shimizu (Osaka City University, D1) The warping degree of a link diagram

12:30–14:00 Lunch

| 14.00 10.00 Champerson. Sang Tour Lee | 14:00-15:30 | Chairperson: | Sang | Youl | Lee |
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- 11. Sun Hyun Park (Kyungpook National University, D3) Note on L(n)-Hyponormality
- 12. Maeng Sang Park (Pusan National University, D3) Braid presentation of a knotted arc with singular points
- 13. Kanako Oshiro (Hiroshima University, D2) 7-colored diagrams with exactly four colors

14. Shin'ya Okazaki (Osaka City University, D1) On Heegaard genus, bridge genus and braid genus for a 3manifold

15. Kenta Okazaki (RIMS, Kyoto University, M2) On the Turaev-Viro SO(3) invariants of lens spaces at even roots of unity

15:30–17:00 Chairperson: Young-Ho Im

- 16. Yuki Okada (Kobe University, M2) The differences of Alexander polynomials caused by a single crossing change in the case of 10_{132}
- 17. Kyeongah Nah (Kyungpook National University, M2) The effect of multiple host for malaria transmission
- 18. Kyeunghui Lee (Pusan National University, D4) A polynomial invariant of long virtual knots
- 19. In Sook Lee (Kyungpook National University, D1) On the Alexander polynomial of periodic links

20. Hosoo Lee (Kyungpook National University, D4) An extension of matrix reverse Holder inequality to n-operators via the geometric mean by Lawson-Lim

16:30–18:00 Chairperson: Yongju Bae

- 21. Shinya Kishimoto (Osaka City University, M2) The sharp-Gordian distance of knots
- 22. Kengo Kishimoto (Osaka City University, D3) The IH-complex of spatial trivalent graphs
- 23. Masashi Kimura (Osaka City University, D3) Coalescing Black Holes in Five-Dimensions
- 24. Young Jin Kim (Pusan National University, D1) Some numerical methods for solving a matrix polynomial

25. Sera Kim (Pusan National University, M2) The properties and examples of some polynomial invariant of virtual links

Saturday 22 August (Every talk is expected to be of 15 minute length.)

9:30–11:00 Chairperson: Taizo Kanenobu

- 26. Seong Uk Kim (Pusan National University, D1) Criterion of singular weights for discrete and continuous spectrums
- 27. Kyoungtark Kim (Pusan National University, M2) On relation between mutually unbiased bases and orthogonal decompositions of Lie algebras of type A
- 28. Joonoh Kim (Pusan National University, D3) The V.A. polynomial of periodic virtual links
- 29. Sunmi Jung (Kyungpook National University, D3) Lightlike surfaces in the Minkowski Space
- 30. Changdo Jung (Kyungpook National University, D3) Geometric mean of n-operators

11:00–12:30 Chairperson: Masahide Iwakiri

- 31. In Dae Jong (Osaka City University, D3) On a simplicial complex of the Alexander polynomials
- 32. Yeonhee Jang (Hiroshima University, D2) Three-bridge presentations of Montesinos links

33. Hiroaki Ishida (Osaka City University, M2) The automorphism group of a compact smooth toric variety and its representations on sections of equivariant line bundles

- 34. Atsushi Ichimori (Osaka City University, M1) Groups of ribbon 2-knots
- 35. Tsuyoshi Houri (Osaka City University, D3) Closed conformal Killing-Yano tensor and uniqueness of Kerr-NUT-de Sitter spacetime

12:30–14:00 Lunch

14:00–15:30 Chairperson: Akio Kawauchi

- 36. You Young Cho (Pusan National University, M2) A new interior point algorithm for $P_*(k)$ LCP based on kernel functions
- 37. Miju Cho (Pusan National University, M2) Polynomials of finite quandles and racks
- 38. Seunghwan Baek (Kyungpook National University, M1) Quartically Hyponormal Weighted Shifts and Their examples
- 39. Eunkyung Ahn (Kyungpook National University, D3) Jointly homogeneous mappings and nonlinear equations

40. Tetsuya Abe (Osaka City University, D3) The band-unknotting number of a knot (joint work with Ryuji Higa)

15:30–20:00 Excursion& Dinner