

Special Session on Knot Theory and Related Topics

Joint Meeting of the KMS and the AMS

December 16–20, 2009, Ewha Womans University, Seoul, Korea

Organizers

Jae Choon Cha (POSTECH) and Kent Orr (Indiana University)

Invited Speakers

Byung Hee Ahn (KAIST)	Taehee Kim (Konkuk University)
Yongju Bae (Kyungpook National University)	Vyacheslav Krushkal (University of Virginia)
Hans Boden (McMaster University)	Jung Hoon Lee (KIAS)
Jae Choon Cha (POSTECH)	Sangyop Lee (Chung-Ang University)
Stefan Friedl (University of Warwick)	Laurentiu Maxim (University of Wisconsin-Madison)
Christopher Herald (University of Nevada, Reno)	Takuya Sakasai (Tokyo Institute of Technology)
Youngsik Huh (Hanyang University)	Rob Schneiderman (Lehman College CUNY)
Stanislav Jabuka (University of Nevada, Reno)	Alexander Stoimenow (KAIST)
Gyo Taek Jin (KAIST)	Toshifumi Tanaka (POSTECH)
Se-Goo Kim (Kyung Hee University)	Cornelia Van Cott (University of San Francisco)

Time Table

	12/16 Wednesday	12/17 Thursday	12/18 Friday	12/19 Saturday
08:30 –09:10		Cornelia Van Cott	Hans Boden	Takuya Sakasai
09:20 –10:00		Se-Goo Kim Gyo Taek Jin	Toshifumi Tanaka Byung Hee Ahn	Taehee Kim
10:10 –10:50		Stefan Friedl	Jae Choon Cha	Slaven Jabuka
02:30 –03:10	Laurentiu Maxim	Vyacheslav Krushkal		
03:20 –04:00	Christopher Herald	Rob Schneiderman		
04:10 –04:50	Jung Hoon Lee Alexander Stoimenow	Youngsik Huh Yongju Bae		
05:00 –05:40	Sangyop Lee			

December 16, 2009 (Wednesday)

- 02:30–03:10 Laurentiu Maxim (University of Wisconsin-Madison)
Knot theory invariants in algebraic geometry
- 03:20–04:00 Christopher Herald (University of Nevada, Reno)
An $SU(3)$ Casson invariant for rational homology spheres
- 04:10–04:30 Jung Hoon Lee (KIAS)
Parity criterion for unstabilized Heegaard splittings
- 04:30–04:50 Alexander Stoimenow (KAIST)
Non-conjugate braids with the same closure link
- 05:00–05:40 Sangyop Lee (Chung-Ang University)
Satellite twisted torus knots

December 17, 2009 (Thursday)

- 08:30–09:10 Cornelia Van Cott (University of San Francisco)
An obstruction to slicing iterated Bing doubles
- 09:20–09:40 Se-Goo Kim (Kyung Hee University)
Splittings of von Neumann rho-invariants
- 09:40–10:00 Gyo Taek Jin (KAIST)
Lattice edge number of figure eight knot
- 10:10–10:50 Stefan Friedl (University of Warwick)
Twisted Alexander polynomials of hyperbolic knots
- 02:30–03:10 Vyacheslav Krushkal (University of Virginia)
The A-B slice problem and topological arbiters
- 03:20–04:00 Rob Schneiderman (Lehman College CUNY)
Geometric filtrations of link concordance and higher-order Arf invariants
- 04:10–04:30 Youngsik Huh (Hanyang University)
Heptagonal knots and Radon partitions
- 04:30–04:50 Yongju Bae (Kyungpook National University)
On the Kauffman bracket polynomial of links with local symmetry

December 18, 2009 (Friday)

- 08:30–09:10 Hans Boden (McMaster University)
Metabelian $SL(n, \mathbb{C})$ representations of knot groups
- 09:20–09:40 Toshifumi Tanaka (POSTECH)
Symmetric unions indistinguishable by knot Floer and Khovanov homology
- 09:40–10:00 Byung Hee Ahn (KAIST)
A family of braids with large conjugacy invariant sets
- 10:10–10:50 Jae Choon Cha (POSTECH)
 L^2 -signature defects and amenable groups

December 19, 2009 (Saturday)

- 08:30–09:10 Takuya Sakasai (Tokyo Institute of Technology)
Homology cylinders in knot theory
- 09:20–10:00 Taehee Kim (Konkuk University)
Combinatorial torsions and the cobordism group of homology cylinders
- 10:10–10:50 Stanislav Jabuka (University of Nevada, Reno)
Witt rings in low dimensional topology