

Intelligence of Low Dimensional Topology

November 7 - November 10, 2005

in Osaka, Japan

This is a conference taking place at the Umeda Satellite of Osaka City University in Osaka, Japan as a part of the research project “Constitution of wide-angle mathematical basis focused on knots”.

Organizers: Akio Kawauchi (Osaka City University),
Toshitake Kohno (University of Tokyo),
Seiichi Kamada (Hiroshima University)

Program:

•November 7 (Mon.)

- 10:10–11:10 Andrei Pajitnov (Universite de Nantes)
Novikov homology, twisted Alexander polynomials, and Thurston norm
- 11:20–12:20 Vu The Khoi (University of Tokyo)
Computing the volume and Chern-Simons type invariants of 3-manifolds
- 14:00–14:40 Hiroshi Goda (Tokyo University of Agriculture and Technology)
Lens surgery
- 15:10–15:50 Takeshi Oota (OCAMI, Osaka City University)
Comments on toric Sasaki-Einstein metrics (joint work with Yukinori Yasui)
- 16:00–16:40 Keiichi Sakai (University of Tokyo)
On the space of all long embeddings $\mathbf{R}^1 \rightarrow \mathbf{R}^n$ and loop spaces of configuration spaces

•November 8 (Tue.)

- 10:10–11:10 Toshifumi Tanaka (University of Tokyo)
Khovanov homology and exotic Casson handles
- 11:20–12:20 Won Taek Song (Korea Institute for Advanced Study, Korea)
The minimum dilatation of pseudo-Anosov 5-braids
- 14:00–14:40 Hajime Fujita (University of Tokyo)
Some properties of real conformal blocks
- 15:10–15:50 Hironobu Kihara (OCAMI, Osaka City University)
Scalar Laplacian on Sasaki-Einstein Manifolds $Y^{p,q}$ (joint work with Makoto Sakaguchi and Yukinori Yasui)
- 16:00–16:40 Tatsuya Tsukamoto (Waseda University)
The almost alternating diagrams of the trivial knot

•November 9 (Wed.)

- 10:10–11:10 Shigeaki Miyoshi (Chuo University)
On Thurston's inequality and a spinnable foliation (joint work with Hiroki Kodama, Yoshihiko Mitsumatsu and Atsuhide Mori)
- 11:20–12:20 Nafaa Chbili (OCAMI, Osaka City University)
On the Graph-skein Algebra of some surfaces
- 14:00–14:40 Shuichi Iida (University of Tokyo)
Meyer's function of genus 2 and eta-invariants
- 15:10–15:50 Masaaki Murakami (OCAMI, Osaka City University)
Infinitesimal Torelli theorem for surfaces with $c_1^2 = 3$ and $\chi = 2$ having 3-torsion
- 16:00–16:40 Nobutaka Boumuki (OCAMI, Osaka City University)
Symplectic homogeneous spaces and real simple Lie groups

•November 10 (Thu.)

- 10:10–11:10 Kazuhiro Ichihara (Osaka Sangyo University)
Euclidean length on a horotorus and the Culler-Shalen norm of slopes
- 11:20–12:20 Jean-Baptiste Meilhan (RIMS (Kyoto University), JSPS)
Borromean surgery and the Casson invariant

URL : <http://www.math.sci.hiroshima-u.ac.jp/top/conf/ildt2005/ildt2005E.html>

Banquet Information A banquet will take place at THE BEER COMPANY near Hankyu Umeda Station (URL is <http://r.gnavi.co.jp/k160135/index.htm>, sorry it's in Japanese). Participants of the conference who would like to participate the banquet should contact with

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to make a reservation by October 31, 2005. The fee is 4,000 JPY.