

Workshop
Topology and Computer 2005

A workshop “Topology and Computer 2005” will be held as follows. This workshop is supported financially by the Ministry of Education, Science, Sports and Culture, Grants-in-Aid for Scientific Research (A) “Geometry and Topology of 3-manifolds II” (Director: Sadayoshi Kojima (Tokyo Institute of Technology) #15204004).

DATE: November 28 – 30, 2005.
LOCATION: Osaka Sangyo University, Umeda Satellite,
Osaka Ekimae Building 4, 22F.

Program

November 28

- 13:00 – 13:50 Tetsuya Hosaka (Utsunomiya University)
Coxeter groups, simplicial complexes and boundaries
- 14:20 – 15:10 Naoko Kamada (OCAMI, Osaka City University)
Constructing a table of virtual knots
- 15:40 – 16:30 Kouji Kodama (Kobe City College of Technology)
Introduction to KNOT Program
- 17:00 – 17:30 Makiko Ishiwata (Tokyo Woman’s Christian University)
5-move equivalence for links up to 9 crossings

November 29

- 9:30 – 10:20 Kazushi Ahara (Meiji University)
Schemes in ‘Kids Cindy’ - interactive geometry software
- 10:40 – 11:30 Michihiko Fujii (Kyoto University)
Points of finite order on a deformation space of hyperbolic structures

- 13:00 – 13:50 Ben Burton (RMIT University)
Theorems, Algorithms and Brute Force: Building a Census of 3-Manifolds
- 14:20 – 15:10 Chuichiro Hayashi (Japan Women’s University)
Calculating fundamental surfaces by hand
- 15:40 – 16:30 Masaaki Suzuki (University of Tokyo)
Twisted Alexander invariants and a partial order in the knot table II
- 17:00 – 17:30 Keiichi Horie (University of Tokyo)
Introduction to Computation Library ~ Doctor K ~
on Knot and Geometry using Java

November 30

- 9:30 – 10:20 Mitsuyuki Ochiai, Noriko Morimura, Akiko Emoto (Nara Women’s University)
Base tangle decompositions and subdivisions of n -string tangles
- 10:50 – 11:30 Mitsuyuki Ochiai, Akiko Emoto, Noriko Morimura (Nara Women’s University)
Homology 3-spheres with 2-connected W -graphs
- 13:00 – 13:50 Sachiko Hamaguchi, Mitsuyuki Ochiai, Noriko Morimura (Nara Women’s University)
Convex 3D drawings of 3-connected planar graphs by Steinitz theorem
- 14:00 – 14:50 Fujio Kako (Nara Women’s University)
Computations of 3-parallel HOMFLY polynomials of 6-braids
- 15:20 – 16:10 Takayuki Nagai (Tottori University of Environmental Studies)
Geometric Algorithms with Imprecise Input
- 16:40 – 17:30 Yo’av Rieck (University of Arkansas)
The four Color theorem and branched covers of S^2
(joint work with Yasushi Yamashita (Nara Women’s University))

Organizers :
Yoshihiko Marumoto (Osaka Sangyo University)
Toshio Harikae
Kazuhiro Ichihara