

Workshop
Mapping class groups, TQFT and invariants of 3-manifolds
—Constructions and Computations—

February 15-17, 2010

Room 213, Main Building of Ookayama Campus, Tokyo Institute of Technology

Organizers: Yuya Koda, Sadayoshi Kojima and Takuya Sakasai.

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Schedule

Monday, February 15

9:50–10:00 Opening

10:00–11:00 Takuya Sakasai (Tokyo Institute of Technology)
Johnson-Morita homomorphisms and homological fibered knots

11:20–12:20 Gwénaél Massuyeau (University of Strasbourg)
(I) On the monoid of homology cylinders and the LMO homomorphism

12:20–14:00 Lunch

14:00–15:00 Yuichi Kabaya (OCAMI)
Quandle homology, hyperbolic volume and Chern-Simons invariant

15:30–16:30 Tomoyoshi Yoshida (Tokyo Institute of Technology)
A construction of a basis of conformal block of $SU(2)$ WZW model and its asymptotic behaviour

Tuesday, February 16

10:00–11:00 Mitsuhiro Takasawa (Tokyo Institute of Technology)
Bounds for minimal dilatations of pseudo-Anosovs

11:20–12:20 Takahito Kuriya (RIMS)
(I) The LMO invariant and related topics

12:20–14:00 Lunch

14:00–15:00 Alex Bene (IPMU)
(I) Fatgraphs, chord diagrams, and the mapping class group

15:30–16:30 Gwénaél Massuyeau (University of Strasbourg)
(II) An infinitesimal version of Morita’s homomorphisms

17:00–18:00 Jérôme Petit (Tokyo Institute of Technology)
The Turaev-Viro HQFT

Banquet

Wednesday, February 17

11:00-12:00 Toshie Takata (Niigata University)

On the $SO(N)$ and $Sp(N)$ free energy of a closed oriented 3-manifold

12:00-14:00 Lunch

14:00-15:00 Takahito Kuriya (RIMS)

(II) The LMO invariant and related topics

15:20-16:20 Alex Bene (IPMU)

(II) Fatgraphs, chord diagrams, and finite type invariants of homology cylinders

16:20-16:30 Ending

(Last modified: February 15)