

Joint MSJ-RIMS Conference

**“Development of Galois -Teichmüller Theory and Anabelian Geometry”**

Date: October 25—30, 2010 / Place: RIMS, Kyoto University, Room 420  
Organizers: H.Nakamura (Chair), F.Pop, L.Schneps, A.Tamagawa

**October 25 Monday**

- 9:30—9:45    Takashi Tsuboi (President of the Mathematical Society of Japan):  
Opening remarks
- 9:45—9:50    General information from the organizing committee
- 10:00—11:00    P. Cartier (IHÉS) :  
Towards Grothendieck's "Dessins d'Enfants"
- 11:30—12:20    Y. André (CNRS) :  
Introduction to tempered anabelian geometry
- Lunch --
- 14:30—15:20    P. Lochak (CNRS):  
Grothendieck-Teichmüller theory from a topological viewpoint
- Tea --
- 16:00—16:50    M. Asada (Kyoto Institute of Technology), H. Nakamura (Okayama University),  
N. Takao (RIMS, Kyoto University), H. Tsunogai (Sophia University):  
Easy walking in GT theory and anabelian geometry, I
- 17:10—18:00    M. Asada(Kyoto Institute of Technology), H. Nakamura (Okayama University),  
N. Takao (RIMS, Kyoto University), H. Tsunogai (Sophia University):  
Easy walking in GT theory and anabelian geometry, II

**October 26 Tuesday**

- 10:00—11:00    L. Schneps (CNRS):  
Survey of the theory of multiple zeta values
- 11:30—12:20    I. Marin (Université Paris Diderot):  
Rigidity characters for the Grothendieck-Teichmüller group
- Lunch --
- 14:30—15:20    A. Schmidt (Heidelberg University):  
Motivic aspects of anabelian geometry
- Tea --
- 16:00—16:50    J. Stix (Heidelberg University) :  
On the passage from local to global in Grothendieck's section conjecture
- 17:10—18:00    J. Ellenberg (University of Wisconsin) :  
Ihara's braid group and fundamental groups of random curves

**October 27 Wednesday**

- 10:00—11:00    K. Wickelgren (Harvard University) :  
Etale  $\pi_1$  obstructions to rational points
- 11:30—12:20    F. Pop (University of Pennsylvania):  
On the p-adic section conjecture
- Lunch --
- Free discussions



### October 28 Thursday

- 10:00--11:00 M. Saïdi (Exeter University), A. Tamagawa (RIMS, Kyoto University):  
Survey on anabelian geometry in positive characteristic  
11:30--12:20 R. Sharifi (University of Arizona) :  
Investigations in the Galois cohomology of number fields

-- Lunch --

- 14:30--15:20 Y. Ihara (RIMS, Kyoto University):  
Arithmetic questions on  $\pi_1(P^1 - \{0,1,\infty\})$  at p

-- Tea --

- 16:00--16:50 D. Harbater (University of Pennsylvania) :  
Local-global principles over arithmetic curves  
18:30-- Banquet

### October 29 Friday

- 10:00--11:00 S. Mochizuki (RIMS, Kyoto University):  
Inter-universal Teichmüller Theory: A Progress Report  
11:30--12:20 M. Matsumoto (University of Tokyo) :  
Universal mixed elliptic motive and derivation algebra of the fundamental group of  
one-punctured elliptic curve (joint work with Richard Hain)

-- Lunch --

- 14:30--15:20 F. Brown (CNRS) :  
On the coalgebra structure of motivic multiple zeta values

-- Tea --

- 16:00--16:50 H. Furusho (Nagoya University) :  
Geometric interpretation of double shuffle relations of multiple polylogarithms at  
roots of unity

### October 30 Saturday

- 10:00--11:00 M. A. Garuti (Università degli Studi di Padova):  
Galois closures and the fundamental group scheme  
11:30--12:20 Y. Hoshi (RIMS, Kyoto University):  
Survey on the combinatorial anabelian geometry of hyperbolic curves

-- Lunch --

Free discussions