Program of RIMS Workshop Algebraic Number Theory and Related Topics

Organizers: Atsushi Shiho (University of Tokyo) Tadashi Ochiai (Osaka University)

Date: December 3 (Mon) ~ December 7 (Fri), 2012 Place: Room 420, RIMS, Kyoto University

December 3 (Mon)

- 10:00 \sim 10:15 $\,$ Introduction
- $\begin{array}{ll} 10:15\sim11:00 & {\rm Tatsuya~Ohshita~(Kyoto~University)}\\ & {\rm Higher~Fitting~ideals~of~Iwasawa~modules~and~Euler~systems} \end{array}$
- 11:15 \sim 12:00 Jiro Nomura (Keio University) On non-commutative Brumer-Stark conjecture
- 13:30 ~ 14:30 Tomokazu Kashio (Tokyo University of Science)
 A survey on Stark's conjectures and a result of Dasgupta-Darmon-Pollack (Survey Talk)
- 14:45 \sim 15:45 Somnath Jha (Osaka University) Fine Selmer group of Hida deformations
- 16:00 \sim 17:00 Masataka Chida (Kyoto University) Anticyclotomic p-adic L-functions for modular forms

December 4 (Tue)

 $\begin{array}{ll} 10:00\sim 10:45 & {\rm Kazuki\ Tokimoto\ (University\ of\ Tokyo)}\\ & {\rm On\ the\ reduction\ modulo\ }p\ of\ representations\ of\ a\ quaternion\ division\ algebra\ over\ a\ p\-adic\ field \end{array}$

- $\begin{array}{ll} 11:00 \sim 12:00 & \mbox{Takahiro Tsushima (Kyushu University)} \\ & \mbox{Geometric realization of the local Langlands correspondence for representations} \\ & \mbox{of conductor exponent three} \end{array}$
- $\begin{array}{ll} 13:30 \sim 14:30 & \mbox{Seidai Yasuda (Osaka University)} \\ & \mbox{Recent progress on multiple zeta values and Deligne-Ihara conjecture (Survey Talk)} \end{array}$
- 14:45 \sim 15:45 Chieh-Yu Chang (National Tsing Hua University) Linear independence of monomials of multizeta values in positive characteristic
- 16:00 \sim 17:00 Alan G. B. Lauder (University of Oxford/Kyushu University) Elliptic curves and *p*-adic *L*-functions

December 5 (Wed)

9:00 \sim 9:45 Yohei Toda (Chuo University)

On the cyclotomic twisted torus and some torsors

- $10:00 \sim 11:00$ Akinari Hoshi (Rikkyo University) Rationality problem of quasi-monomial actions
- 11:15 \sim 12:15 Wen-Ching Winnie Li (Pennsylvania State University/National Tsing Hua University) The impact of computing on noncongruence modular forms
- 13:45 \sim 14:45 Naotake Takao (RIMS, Kyoto University) Oda's problem on universal monodromy representations and related topics
- $\begin{array}{ll} 15:00\sim 16:00 & {\rm Shinichi\ Mochizuki\ (RIMS,\ Kyoto\ University)}\\ & {\rm Invitation\ to\ Inter-universal\ Teichmüller\ Theory} \end{array}$

December 6 (Thu)

- 9:00 \sim 9:45 Tomohiro Nagasaka (Kyoto University) Cohomology calculus in logarithmic geometry
- $\begin{array}{ll} 10:00\sim 10:45 & {\rm Tetsuya}~{\rm Uematsu}~({\rm University}~{\rm of}~{\rm Tokyo})\\ & {\rm On}~{\rm the}~{\rm Brauer}~{\rm groups}~{\rm of}~{\rm diagonal}~{\rm cubic}~{\rm surfaces} \end{array}$
- $\begin{array}{ll} 11:00\sim 12:00 & \mbox{Toshiro Hiranouchi} \mbox{ (Hiroshima University)} \\ & \mbox{Milnor type K-groups attached to algebraic groups and additive higher Chow groups} \end{array}$
- 13:30 \sim 14:30 Satoshi Mochizuki (Chuo University) A geometric presentation theorem
- $\begin{array}{ll} 14:45 \sim 15:45 & \mbox{Yuki Kato (Tohoku Gakuin University)} \\ & \mbox{The Adams operation on group complete symmetric monoidal ∞-categories} \end{array}$
- $\begin{array}{ll} 16:00\sim 17:00 & {\rm Thomas \ Geisser \ (Nagoya \ University)}\\ & {\rm Suslin \ homology, \ Albanese \ varieties \ and \ Rojtman's \ theorem} \end{array}$
- 18:00 \sim 20:00 Conference Banquet

December 7 (Fri)

- 9:00 \sim 9:45 Yasuhiro Ishitsuka (Kyoto University) Complete Intersections of Two Quadrics and Galois Cohomology
- 10:00 ~ 10:45 Megumi Takata (Kyushu University) On the Lefschetz trace formula for p^n -torsion etale cohomology
- 11:00 \sim 12:00 Noriko Hirata-Kohno (Nihon University) Polylogarithms revisited from the viewpoint of the irrationality
- 13:30 ~ 14:30 Kenichi Namikawa (National Taiwan University) On constructions of theta functions on GSp(4) and its mod p nonvanishing
- 14:45 \sim 15:45 Takashi Taniguchi (Kobe University) Counting cubic extensions over a number field
- $\begin{array}{ll} 16:00\sim 17:00 & {\rm Masami} \mbox{ Ohta (Professor emeritus, Tokai University)} \\ {\rm Rational torsion in modular Jacobian varieties} \end{array}$

Program Committee:

Atsushi Shiho (Univ. of Tokyo), Tadashi Ochiai (Osaka Univ.), Noriyuki Otsubo (Chiba Univ.)