

RIMS Workshop

Algebraic Number Theory and Related Topics



Organizers:

Iwao Kimura (University of Toyama)

Shinichi Kobayashi (Kyushu University)

Date: November 30 (Mon)– December 4 (Fri), 2020.

Place: Research Institute for Mathematical Sciences (RIMS), Kyoto University + Zoom

Everyone but speakers, chairpersons, and program committee attends through Zoom.

November 30 (Mon)

11:05 – 11:10 Introduction

11:10 – 12:00 Toshiki Matsusaka* (Nagoya University)

Recent developments on cycle integrals and mock modular forms

13:30 – 14:20 Ryutaro Sekigawa (Tokyo University of Science)

Relative power integral bases for cyclic extensions

14:40 – 15:30 Ryoji Shimizu (RIMS)

The Neukirch-Uchida theorem with restricted ramification

15:50 – 16:40 Ildar Gaisin (the University of Tokyo)

Relative A_{inf} -cohomology

December 1 (Tue)

10:00 – 10:50 Yohsuke Matsuzawa (Brown University)

Vojta's conjecture and arithmetic dynamics

11:10 – 12:00 Kaoru Sano (Doshisha University)

Zariski density of points with maximal arithmetic degree

13:30 – 14:20 Makiko Sasada (the University of Tokyo)

Geometric Perspectives for Hydrodynamic Limits (Part 1)

14:40 – 15:30 Kenichi Bannai (Keio University/Riken)

Geometric Perspectives for Hydrodynamic Limits (Part 2)

15:50 – 16:40 Hohto Bekki (Keio University)

A new construction of Eisenstein cocycle and the special values of Dedekind zeta functions

December 2 (Wed)

- 10:00 – 10:50 Naganori Yamaguchi (RIMS)
The m -step solvable Grothendieck conjecture for genus 0 curves over finitely generated fields
- 11:10 – 12:00 Isamu Iwanari* (Tohoku University)
Tannakian aspects of stable infinity-categories and applications
- 12:10 – Meeting of the steering committee (mainly for the committee members)

December 3 (Thu)

- 11:10 – 12:00 Masato Kurihara (Keio University)
Survey on the Brumer-Stark conjecture and the proof by Dasgupta and Kakde
- 13:30 – 14:20 Kazuaki Murakami (Keio Girls Senior High School / Keio University)
Weak Greenberg's Generalized Conjecture For Imaginary Quadratic Fields
- 14:40 – 15:30 Takenori Kataoka (Keio University)
Higher codimension behavior in equivariant Iwasawa theory for CM-fields
- 15:50 – 16:40 Kentaro Nakamura (Saga University)
Congruences for zeta elements and an application to Iwasawa main conjecture

December 4 (Fri)

- 10:00 – 10:50 Shun Ishii (RIMS)
The \mathfrak{p} -primary uniform boundedness conjecture for Drinfeld modules
- 11:10 – 12:00 Momonari Kudo, Shushi Harashita* (the University of Tokyo, Yokohama National University)
Introduction to computational algebraic geometry - constructing algebraic curves over finite fields with many rational points
- 13:30 – 14:20 Yasuhiro Oki (the University of Tokyo)
On basic loci of Shimura varieties for spinor groups
- 14:40 – 15:30 Kazuhiro Ito (Kyoto University)
Uniform local constancy of etale cohomology of rigid analytic varieties
- 15:50 – 16:40 Nobuo TSUZUKI (Tohoku University)
On the minimal slope conjecture of F -isocrystals
- 16:40 – 16:45 Closing

* Invited speakers.

Program Committee:

Iwao Kimura (University of Toyama),
Shinichi Kobayashi (Kyushu University),
Takashi Hara (Tsuda University)