2025 Lyon-Tokyo conference
Number Theory and Arithmetic Geometry

Date: March 24 (Mon) – March 28 (Fri), 2025
Place: salle 435, the UMPA Laboratory,
ÉNS de Lyon, Lyon, France

March 24 (Mon)

9:30–10:30   Gabriel Dospinescu (Univ Clermont Auvergne)
Duality and flip-flop in local Shimura varieties

11:00–12:00   Kojiro Matsumoto (Univ Tokyo)
Classicality theorems and its applications to the automorphy lifting theorem and the Breuil-Mézard conjecture in some $\mathrm{GL}_2(\mathbb{Q}_{p^2})$ cases

Buffet Lunch

14:00–15:00   Zhixiang Wu (Univ Münster)
Geometric translations of (φ, Γ)-modules for $\mathrm{GL}_2(\mathbb{Q}_p)$

15:30–16:30   Atsushi Shiho (Univ Tokyo)
Blow-up invariance for Hodge-Witt sheaves with modulus

March 25 (Tue)

9:30–10:30   Yutaro Mikami (Univ Tokyo)
Cohomology of (φ, Γ)-modules and duality

11:00–12:00   Rustam Steingart (ÉNS de Lyon)
On the higher analytic vectors of B_e

Lunch Break

14:00–15:00   Takumi Watanabe (Univ Tokyo, IHES)
On the (φ, Γ)-modules corresponding to crystalline representations and semi-stable representations

15:30–16:30   Benjamin Schraen (Univ Lyon 1)
On mod p representations of GL_2 in the cohomology of Shimura curves

March 26 (Wed)

9:30–10:30   François Brunault (ÉNS de Lyon)
L-functions and regulators of modular forms

11:00–12:00   Yoichi Mieda (Univ Tokyo)
On vanishing of the supercuspidal part of the l-adic cohomology of local Shimura varieties

Lunch Break

14:00–16:30   Free discussion

March 27 (Thu)

9:30–10:30   Yuta Takaya (Univ Tokyo)
  On depth-zero integral models of local Shimura varieties

11:00–12:00   Naoki Imai (Univ Tokyo)
  Local Langlands correspondence for p-adic covering groups

Lunch Break

14:00–15:00   Anthony Poëls (Univ Lyon 1)
  On approximation to a real number by algebraic numbers of bounded degree

15:30–16:30   Veronika Ertl (Univ Caen)
  Conjectures on L-functions for varieties over function fields and their relations

16:40–17:40   Shane Kelly (Univ Tokyo)
  TBA

March 28 (Fri)

9:30–10:30   Sandra Rozensztajn (ÉNS de Lyon)
  Potentially crystalline deformation rings and the Breuil-Mézard conjecture for PGL_n

11:00–12:00   Takeshi Saito (Univ Tokyo)
  Log monogenic extensions and ramification theory

Lunch Break

14:00–16:30   Free discussion

Organizers

Laurent BERGER (ÉNS de Lyon)
Sandra ROZENSZTAJN (ÉNS de Lyon)
Benjamin SCHRAEN (Univ Lyon 1)
Takeshi TSUJI (Univ Tokyo)