

Workshop on Galois Representations and Automorphic Forms

Monday, March 21, 2011 (All day) - Friday, March 25, 2011 (All day)
2010-2011

The workshop will combine background talks aimed at graduate students and post-docs with research reports on the latest developments. The list of speakers will be decided nearer the date of the workshop so as to be able to incorporate last minute developments. The workshop will concentrate on the following topics:

Automorphy and potential automorphy of Galois representations and applications.

Integral models of cohomology of Shimura varieties and Rapoport-Zink spaces.

p-adic comparison theorems and applications to modular/automorphic forms.

p-adic L-functions and main conjectures, especially methods coming from automorphic forms.

The p-adic Langlands program.

Organizers:

Pierre Colmez, National Center for Scientific Research/IAS, Michael Harris, University of Paris VII/IAS, Christopher Skinner, Princeton University/IAS, Richard Taylor, Harvard University/IAS

Speakers:

D. Burns (King's College London), F. Calegari (IAS), Ana Caraiani (Harvard), L. Clozel (U Paris), G. Dospinescu (Ecole Polytechnique), T. Gee (IAS), D. Geraghty (IAS), M. Emerton (Northwestern), H. Hida (UCLA), A. Iovita (Concordia), M. Kakde (Univ College London), T. Kaletha (IAS), S. Morel (IAS), V. Paskunas (Univ Bielefeld), V. Pilloni (Columbia), P. Scholze (Univ Bonn), M-F. Vigneras (Univ Jussieu) and J. Weinstein (IAS)

Participants:

The following people will be in attendance for most, if not all, of the workshop activities: L. Berger, F. Diamond, T. Haines, M. Harris, F. Herzig, C. Khare, K.-W. Lan, T. Liu, E. Mantovan, J. Newton, S. W. Shin, C. Skinner, J. Suh, R. Taylor, Y. Tian, E. Urban, A. Wiles.

Registration - [To register please click here](#)

Registration for the meals and workshop is required. (Speakers do not need to register.)

Although there is no registration fee, because seating is limited both in the seminar room and in our dining hall, you are requested to register if you wish to attend all or part of the workshop. In addition, in order for our chef to prepare enough food, we need to have a headcount for the meals. Please note the workshop attendees are expected to pay for their lunch. Approximate range of prices is \$4.00 for a salad to \$9.00 for an entree. Vegetarian lunches will be available. Only cash is accepted at the cash registers. Credit cards and personal checks are not accepted.

Agenda

All talks will take place in Simonyi Hall Seminar Room

Monday, March 21, 2011

10:00 - 11:00 Laurent Clozel, The proof of the Burger-Sarnak conjecture

11:30 - 12:30 Tasho Kaletha, Supercuspidal L-packets

12:30 - 2:15 Lunch (IAS Dining Hall)

2:30 - 3:30 Vincent Pilloni, Construction of eigenvarieties and coherent cohomology

3:30 - 4:00 Tea (Fuld Hall Common Room)

4:00 - 5:00 Adrian Iovita, An overconvergent Eichler-Shimura map

Tuesday, March 22, 2011

10:00 - 11:00 Ana Caraiani, Local-global compatibility and monodromy

11:30 - 12:30 Sophie Morel, Intersection cohomology is useless

12:30 - 2:15 Lunch (IAS Dining Hall)

2:30 - 3:30 Peter Scholze, Perfectoid spaces

3:30 - 4:00 Tea (Fuld Hall Common Room)

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4:00 - 5:00 Jared Weinstein, A semistable model for the tower of modular curves

Wednesday, March 23, 2011

10:00 - 11:00 Frank Calegari, Minimal modularity lifting theorems for imaginary quadratic fields.

11:30 - 12:30 Matthew Emerton, p-adic Hodge-theoretic properties of étale cohomology with mod p coefficients, and the cohomology of Shimura varieties - 1

12:30 - 2:15 Lunch (IAS Dining Hall)

2:30 - 3:30 Toby Gee, p-adic Hodge-theoretic properties of étale cohomology with mod p coefficients, and the cohomology of Shimura varieties - 2

3:30 - 4:00 Tea (Fuld Hall Common Room)

4:00 - 5:00 David Geraghty, Local-global compatibility at primes dividing l

Thursday, March 24, 2011

10:00 - 11:00 Marie-France Vignéras, From general étale (ϕ, Γ) -modules to representations of $G(\mathbb{Q}_p)$

11:30 - 12:30 Vytas Paskunas, The image of Colmez's Montreal functor

12:30 - 2:15 Lunch (IAS Dining Hall)

2:30 - 3:30 Gabriel Dospinescu, Locally algebraic vectors in the p-adic Langlands correspondence

3:30 - 4:00 Tea (Fuld Hall Common Room)

Friday, March 25, 2011

10:00 - 11:00 Haruzo Hida, Vanishing of the μ -invariant of p -adic Hecke L functions

11:30 - 12:30 David Burns, Recent developments in non-commutative Iwasawa theory - 1

12:30 - 2:15 Lunch (IAS Dining Hall)

2:30 - 3:30 Mahesh Kakde, Recent developments in non-commutative Iwasawa theory - 2

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Transportation and Housing

Information regarding transportation and accommodations in the Princeton area can be found at www.princetonol.com. Please note that if you are staying on Route 1 you should inquire whether the hotel has a shuttle service to and from the IAS. We have several group rates with local hotels. Please use the following if you plan to stay at these hotels: Hyatt Place and Regency Group Rate #34975. The Regency offers a slightly lower rate. The Marriott Residence Inn Group Rate # is INA.

Directions to IAS

www.ias.edu/about/directions

terms:

- [workshop](#)