London Mathematical Society EPSRC Durham Symposium

AUTOMORPHIC FORMS AND GALOIS REPRESENTATIONS

Monday 18 July 2011 – Thursday 28 July 2011

PROGRAMME

INCLUDES PARTICIPANT LIST AND ABSTRACTS

London Mathematical Society - EPSRC Durham Symposium

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Monday 18th July - Thursday 28th July 2011

Programme

All lectures take place in room D110 in the Dawson Building on the Science Site. Some of the lectures are grouped into series, indicated as follows:

- ❖ L1:   p-adic local Langlands
- ❖ L2:   Curves and vector bundles in p-adic Hodge theory
- ❖ L3:   The fundamental lemma and trace formula
- ❖ L4:   Anabelian geometry
- ❖ L5:   Potential automorphy

Coffee and Tea are served in D104. Meals are taken at Grey College.

Monday 18th July

14:00-19:00	Registration (in JCR)	
19:00-20:00	Dinner	

Tuesday 19th July

07:45-09:00	Breakfast	
09:15-10:15	L. Berger	L1: (φ, Γ)-modules
10:15-10:45	Coffee	
10:45-11:45	L. Fargues	L2: *p-adic Hodge theory, I*
11:45-12:45	T. Haines	L3: *Introduction to endoscopic transfer*
13:15-14:15	Lunch	
15:45-16:45	H. Darmon	*A p-adic Gross-Zagier formula for Garrett triple product L-functions*
16:45-17:15	Coffee	
17:15-18:15	F. Brown	*Mixed Tate motives over Z and fundamental group of P^1 minus 3 points*
19:00-20:00	Dinner	
20:00	Wine and Cheese	

Wednesday 20th July

07:45-09:00	Breakfast	
09:15-10:15	P. Colmez	L1: *(φ, Γ)-modules and representations of GL(2,Qp), I*
10:15-10:45	Coffee	
10:45-11:45	L. Fargues	L2: *p-adic Hodge theory, II*
11:45-12:45	C. Breuil	*Extensions between Galois characters and mod p local-global compatibility for GL2*
13:15-14:15	Lunch	
15:45-16:45	W. Niziol	Comparison theorems: the open case
16:45-17:15	Coffee	
17:45-18:45	H. Furusho	*Around associators*
19:00-20:00	Dinner	

Thursday 21st July

07:45-09:00	Breakfast	
09:15-10:15	P. Colmez	L1: *(φ, Γ)-modules and representations of GL(2,Qp), II*
10:15-10:45	Coffee	
10:45-11:45	F. Pop	L4: *General theory of outer representations of the Galois group*
11:45-12:45	P.-H. Chaudouard	L3: *Geometry of the fundamental lemma*
13:15-14:15	Lunch	
14:15-15:15	Group photo	
15:00-16:00	Cathedral visit	
16:45-17:15	Coffee	
17:15-18:15	F. Pop	L4: *Grothendieck's Section Conjecture*
19:00-20:00	Dinner	

Friday 22nd July

07:45-09:00	Breakfast	
09:15-10:15	V. Paskunas	L1: *On the Breuil-Mezard conjecture*
10:15-10:45	Coffee	
10:45-11:45	J.-M. Fontaine	L2: *p-adic Hodge theory, III*
11:45-12:45	G. Chenevier	*Kneser neighbours and orthogonal Galois representations in dimensions 16 and 24*
13:15-14:15	Lunch	
15:45-16:45	M. Emerton	*Moduli of potentially semi-stable Galois representations*
16:45-17:15	Coffee	
17:15-18:15	Y. Hoshi	L4: *Classical anabelian geometry*
19:00-20:00	Dinner	

Saturday 23rd July

07:45-09:00	Breakfast	
09:15-10:15	P. Schneider	*From etale (φ,Γ)-modules to equivariant sheaves*
10:15-10:45	Coffee	
10:45-11:45	J.-M. Fontaine	L2: *p-adic Hodge theory, IV*
11:45-12:45	S. Shin	L3: *The trace formula and its applications, I*
13:15-14:15	Lunch	
15:45-16:45	M. Dimitrov	*On the eigencurve at classical weight one points*
16:45-17:15	Coffee	
17:15-18:15	Y. Hoshi	L4: *Grothendieck conjecture over local fields --- from "relative" to "absolute" ---*
19:00-20:00	Dinner	

Sunday 24rd July

07:45-09:00	Breakfast	
09:15	Day Trip to Whitby and Robin Hoods Bay	
19:00-20:00	Dinner	

Monday 25th July

07:45-09:00	Breakfast	
09:15-10:15	K. Buzzard	*Reductions of 2-dimensional crystalline representations.*
10:15-10:45	Coffee	
10:45-11:45	R. Taylor	L5: *Potential automorphy: Introduction*
11:45-12:45	S. Shin	L3: *The trace formula and its applications, II*
13:15-14:15	Lunch	
15:45-16:45	T. Gee	L5: *Potential automorphy: The main theorem*
16:45-17:15	Coffee	
17:15-18:15	C. Bushnell	*To an effective local Langlands correspondence*
19:00-20:00	Dinner	

Tuesday 26th July

07:45-09:00	Breakfast	
09:15-10:15	V. Abrashkin	*A semi-stable case of the Shafarevich Conjecture*
10:15-10:45	Coffee	
10:45-11:45	Y Tian	*Classicality of overconvergent Hilbert modular forms in the quadratic inert case*
11:45-12:45	D. Burns	*On main conjectures in geometric Iwasawa theory and related conjectures*
13:15-14:15	Lunch	
15:45-16:45	T. Gee	L5: *Potential automorphy: Applications*
16:45-17:15	Coffee	
17:15-18:15	L. Dieulefait	*Non-solvable base change for GL(2)*
19:00	Conference Dinner	

Wednesday 27th July

07:45-09:00	Breakfast	
09:15-10:15	J. Tilouine	*Overconvergent Igusa tower and overconvergent Siegel forms*
10:15-10:45	Coffee	
10:45-11:45	B. Stroh	*Classicity and overconvergence*
11:45-12:45	J.-P. Wintenberger	*Ramification and Iwasawa modules*
13:15-14:15	Lunch	
15:45-16:45	R. Taylor	L5: *Potential automorphy: Outline of the proofs*
16:45-17:15	Coffee	
19:00-20:00	Dinner	

Thursday 28th July

07:45-09:00	Breakfast

Departure after breakfast, participants are asked to vacate their rooms by 10.00 am