



EPSRC Symposium on

Selmer Groups, Descent and the Distribution of Ranks

24-28 September 2012

Organizers: John Cremona, Tim Dokchitser, Tom Fisher, Samir Siksek

All talks will be in Room B3.03, Zeeman Building (Mathematics department)

PROGRAMME

Monday 24/9

- 08:00-09:15 Registration in Room B1:37; Coffee in the Mathematics Institute Common Room
- 09:15-10:15 **Brian Conrey** *Rank two in the family of quadratic twists of an elliptic curve*
(American Institute of Mathematics and Bristol)
- 10:15-11:00 Coffee in the Mathematics Institute Common Room
- 11:00-12:00 **Victor Flynn** *Descent via (3,3)-isogeny on Jacobians of genus 2 curves*
(Oxford)
- 12:00-14:00 Lunch in the Mathematics Institute Common Room
- 14:00-15:00 **Nils Bruin** *Classgroups and congruent primes*
(Simon Fraser)
- 15:00-16:00 Tea in the Mathematics Institute Common Room
- 16:00-17:00 **Damiano Testa** *The Büchi K3 surface and its rational points*
(Warwick)
- 17:00 Reception in the Mathematics Institute Common Room
- 18:00 Dinner in the Mathematics Institute Common Room

Tuesday 25/9

- 09:15-10:15 **Vladimir Dokchitser** *Growth of Sha in towers of number fields*
(Cambridge)
- 10:15-11:00 Coffee in the Mathematics Institute Common Room
- 11:00-12:00 **Manjul Bhargava** *Explicit 2-descent and the average size of the 2-Selmer group of Jacobians of odd hyperelliptic curves*
(Princeton)
- 12:00-14:00 Lunch in the Mathematics Institute Common Room
- 14:00-15:00 **Michael Stoll** *Many curves with few rational points*
(Bayreuth)
- 15:00-15:30 Tea in the Mathematics Institute Common Room
- 15:30-16:00 **Shun'ichi Yokoyama** *A database project of elliptic curves having everywhere good reduction*
(Kyushu)
- 16:15-16:45 **Werner Bley** *Equivariant BSD conjecture in cyclic p-power extensions*
(LMU München)
- Evening: Conference Dinner at Baddesley Clinton. Coach departs from rear of Mathematics building at 17:15; return journey via Kenilworth to campus at 21:30.

For further information on these and other events see:

go.warwick.ac.uk/mathsevents

or contact: **Mathematics Research Centre, Zeeman Building,
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PROGRAMME cont.

Wednesday 26/9

- 09:15-10:15 **Alice Silverberg** *Explicit points on a family of Jacobians of superelliptic curves over global function fields*
(UC Irvine)
- 10:15-11:00 Coffee in the Mathematics Institute Common Room
- 11:00-12:00 **Wojciech Gajda** *Abelian varieties over function fields and independence of l -adic representations*
(Adam Mickiewicz University)
- 12:00-14:00 Lunch in the Mathematics Institute Common Room
- Free Afternoon

Thursday 27/9

- 09:15-10:15 **Karl Rubin** *Higher rank Kolyvagin systems*
(UC Irvine)
- 10:15-11:00 Coffee in the Mathematics Institute Common Room
- 11:00-12:00 **Christian Wuthrich** *On the class group pairing on elliptic curves*
(Nottingham)
- 12:00-14:00 Lunch in the Mathematics Institute Common Room
- 14:00-15:00 **Wei Ho** *Average sizes of Selmer groups in families of elliptic curves*
(Columbia)
- 15:00-16:00 Tea in the Mathematics Institute Common Room
- 16:00-16:30 **Zev Klagsbrun** *New results concerning the distribution of 2-Selmer ranks within the quadratic twist family of an elliptic curve*
(Wisconsin)
- 16:45-17:15 **Filip Najman** *Ranks of elliptic curves with prescribed torsion over number fields*
(Zagreb)

Friday 28/9

- 09:15-10:15 **Sir Peter Swinnerton-Dyer** *Diagonal hypersurfaces and the Bloch-Kato conjecture*
(Cambridge)
- 10:15-11:00 Coffee in the Mathematics Institute Common Room
- 11:00-12:00 **Mark Watkins** *Large ranks of quadratic twists of the congruent number curve*
(Sydney)
- 12:00-14:00 Lunch in the Mathematics Institute Common Room
- 14:00-14:30 **Peter Bruin** *Optimal bounds for the difference between the Néron-Tate height and the Weil height on elliptic curves over $\mathbb{Q}_{\bar{p}}$*
(Zurich)
- 14:45-15:15 **Alex Bartel** *Elliptic curves whose Selmer groups grow in all 'small' extensions*
(Warwick)

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