Explicit Methods in Number Theory:

Conference in Honour of John Cremona's 60th Birthday
4-8 April 2016

Organisers: Lassina Dembele (Warwick), Tom Fisher (Cambridge), Haluk Sengun (Sheffield), Samir Siksek (Warwick)

Programme
All lectures will be held in Room MS.02, Mathematics Institute
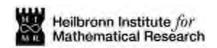
Monday 4 April

08:30-09:15	Registration and coffee in the Mathematics Institute Common Room	
09:15-10:15	**Hendrik Lenstra** (Leiden)	*Abelian automorphisms towers*
10:15-11:00	Coffee and tea break in the Undergraduate Workroom A0.05	
11:00-12:00	**Henri Cohen** (Bordeaux)	*L-functions and modular forms in Pari/GP*
12:00-14:00	Lunch in the Undergraduate Workroom A0.05	
14:00-15:00	**Haluk Sengun** (Sheffield)	*Mod p automorphic forms*
15:00-15:45	Coffee and tea break in the Undergraduate Workroom A0.05	
15:45-16:45	**Tony Scholl** (Cambridge)	*Special values of L-functions*
17:00-18:15	Wine reception in the Mathematics Institute Common Room	
18:30	Conference dinner at Scarman	

Tuesday 5 April

09:15-10:15	**Tom Fisher** (Cambridge)	*Binary quartics and the Cassels-Tate pairing*
10:15-11:00	Coffee and tea break in the Undergraduate Workroom A0.05	
11:00-12:00	**Lassina Dembele** (Warwick)	*On the existence of abelian surfaces with everywhere good reduction*
12:00-14:00	Lunch in the Undergraduate Workroom A0.05	

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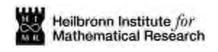Engineering and Physical Sciences Research Council

Programme cont.

14:00-15:00 **Lynne Walling** (Bristol) *Explicit action of Hecke operators on half-integral weight Siegel Eisenstein series*

15:00-15:45 Coffee and tea break in the Undergraduate Workroom A0.05

15:45-16:45 **Ariel Pacetti** (Leverhulme Trust Visiting Professor) *Computing tables of elliptic curves over $\mathbb{Q}(i)$*

Wednesday 6 April

09:15-10:15 **Michael Stoll** (Bayreuth) *The Generalized Fermat equation $x^2+y^3=z^{11}$*

10:15-11:00 Coffee and tea break in the Undergraduate Workroom A0.05

11:00-12:00 **Samir Siksek** (Warwick) *Semistability and Serre's uniformity*

12:00 Lunch in the Undergraduate Workroom A0.05
Free Afternoon.

Thursday 7 April

09:15-10:15 **Andrew Sutherland** (MIT) *Torsion subgroups of rational elliptic curves over the compositum of all cubic fields*

10:15-11:00 Coffee and tea break in the Undergraduate Workroom A0.05

11:00-12:00 **Barinder Banwait** (Essen) *Traces of Frobenius and an inverse Galois Problem for cubic surfaces over finite fields*

12:00-14:00 Lunch in the Undergraduate Workroom A0.05

14:00-15:00 **Denis Simon** (Caen) *Squares represented by cubic forms*

15:00-15:45 Coffee and tea break in the Undergraduate Workroom A0.05

15:45-16:45 **Soma Purkait** (Kyushu) *Hecke algebras, new vectors and characterization of the new space*

Friday 8 April

09:15-10:15 **Manjul Bhargava** (Princeton) *A positive proportion of plane cubics fail (respectively satisfy) the Hasse principle*

10:15-11:00 Coffee and tea break in the Undergraduate Workroom A0.05

11:00-12:00 **Bryan Birch** (Oxford) *Insoluble curves*

12:00-13:00 Lunch in the Undergraduate Workroom A0.05 and departure