

**Workshop on
“Heights in Diophantine geometry, group theory and additive combinatorics”**

**organized by
Robert Tichy, Jeffrey Vaaler, Martin Widmer, Umberto Zannier**

November 25 - 29, 2013

• **Monday, November 25, 2013**

09:30 **Opening & Registration**

10:00 – 10:45 **Emmanuel Breuillard**

Uniform height lowers bounds on character varieties of reductive groups, and the uniform Tits alternative: part I

10:45 – 11:15 *coffee break*

11:15 – 12:00 **Gaël Rémond**

Generalized Lehmer problems

12:00 – 14:00 *lunch break*

14:00 – 14:45 **Francesco Amoroso**

On fields with the Bogomolov property

15:00 – 15:45 **Sinnou David**

Points of small height on abelian varieties over function fields

15:45 – 16:15 *break*

16:15 – 16:45 **Jeffrey Thunder**

On sums of quotients of certain L-series over function fields

16:55 – 17:25 **Benjamin Klopsch**

Zeta functions of groups - representations of arithmetic groups

• **Tuesday, November 26, 2013**

10:00 – 10:45 **Emmanuel Breuillard**

Uniform height lowers bounds on character varieties of reductive groups, and the uniform Tits alternative: part II

10:45 – 11:15 *coffee break*

11:15 – 12:00 **Shou-Wu Zhang**

Congruent number problem and L-functions

12:00 – 14:00 *lunch break*

14:00 – 14:45 **David Masser**

Unlikely intersections for algebraic curves in positive characteristic

14:55 – 15:25 **Cameron Stewart**

A refinement of the abc conjecture

15:35 – 16:05 **Rainer Dietmann**

Quantitative versions of Hilbert's Irreducibility Theorem, and Probabilistic Galois Theory

16:05 – 16:30 *break*

16:30 – 17:00 **Christopher Frei**

Manin's conjecture for a singular del Pezzo surface over number fields

• **Wednesday, November 27, 2013**

10:00 – 10:45 **Emmanuel Breuillard**

Uniform height lowers bounds on character varieties of reductive groups, and the uniform Tits alternative: part III

10:45 – 11:15 *coffee break*

11:15 – 12:00 **Jeffrey Vaaler**

Schauder bases and heights of algebraic numbers

12:00 – 14:00 *lunch break*

14:00 – 14:45 **Yann Bugeaud**

Root separation of integer polynomials

14:55 – 15:25 **Thái Hoàng Lê**

Intersective polynomials and Diophantine approximation

15:35 – 16:05 **Victor Beresnevich**

Badly approximable points on manifolds and Schmidt's conjecture in higher dimensions

Heurigen-Dinner

• **Thursday, November 28, 2013**

10:00 – 10:45 **Igor Shparlinski**

Effective Hilbert's Nullstellensatz and Finite Fields

10:45 – 11:15 *coffee break*

11:15 – 12:00 **Pietro Corvaja**

Perfect powers with few non-zero digits

12:00 – 14:00 *lunch break*

14:00 – 14:45 **Kálmán Győry**

Effective bounds for the solutions of Diophantine equations over finitely generated domains

14:55 – 15:25 **Sara Checcoli**

On the Northcott and Bogomolov properties for fields and groups

15:35 – 16:05 **Lukas Pottmeyer**

Heights and Free Abelian Groups

16:05 – 16:30 *break*

16:30 – 17:00 **Robert Grizzard**

Relative Bogomolov extensions

- **Friday, November 29, 2013**

09:45 – 10:30 **Yuri Bilu**

Effective proof of the theorem of André on the complex multiplication points on curves

10:30 – 11:00 *coffee break*

11:00 – 11:30 **Walter Gubler**

Chambert-Loir's measures

11:40 – 12:10 **Patrice Philippon**

Essential minima of toric varieties

All lectures take place in the ESI Boltzmann Lecture Hall