

Workshop on
“Arithmetic Statistics and Local-Global Principles”

September 20 - 24, 2021

organized by

Tim Browning (ISTA, Klosterneuburg), Daniel Loughran (U Bath),
Rachel Newton (KCL, London)

• **Monday, September 20th, 2021**

09:00 – 09:30 **Registration & Welcome**

09:30 – 10:30 **Carlo Pagano (University of Glasgow)**

Statistics of integral points on conics

10:30 – 11:00 **Coffee Break**

11:00 – 12:00 **Vlad Matei (Tel Aviv U)**

Probabilistic Galois Theory - The Square Discriminant Case

12:00 – 15:00 **Lunch Break**

15:00 – 16:00 **Efthymios Sofos (University of Glasgow)**

Schinzel's Hypothesis with probability 1 and rational points on varieties in families

16:00 – 16:30 **Coffee Break**

16:30 – 17:30 **Alexei Skorobogatov (Imperial College London/FRIAS University of Freiburg)**

Schinzel's Hypothesis with probability 1 and rational points on varieties in families (in two parts)

• **Tuesday, September 21st, 2021**

09:15 – 10:15 **Margherita Pagano (Leiden U)**

An example of a Brauer-Manin obstruction to weak approximation at a prime with good reduction

10:15 – 11:00 **Coffee Break**

11:00 – 12:00 **Adam Morgan (University of Glasgow)**

Integral Galois module structure of Mordell–Weil groups

12:00 – 15:00 **Lunch Break**

15:00 – 16:00 **Martin Widmer (RHUL)**

Northcott numbers for the house and Weil height

16:00 – 16:30 **Coffee Break**

16:30 – 17:30 **Florian Wilsch (ISTA, Klosterneuburg)**

Integral points of bounded height on a certain toric variety

- **Wednesday, September 22nd, 2021**

09:15 – 10:15 **Ross Paterson (University of Glasgow)**

Average Ranks of Elliptic Curves after p -Extension

10:15 – 11:00 **Coffee Break**

11:00 – 12:00 **Beth Romano (U Oxford)**

Arithmetic statistics via graded Lie algebras

18:00 – 23:00 **Conference Dinner**

- **Thursday, September 23rd, 2021**

09:15 – 10:15 **Simon Rydin Myerson (U Warwick)**

Fibrations over elliptic curves, Brauer groups and the elliptic sieve

10:15 – 11:00 **Coffee break**

11:00 – 12:00 **Marta Pieropan (Utrecht U)**

Hyperbola method and Campana points on toric varieties

12:00 – 15:00 **Lunch Break**

15:00 – 16:00 **Sam Streeter (U Bath)**

Weak approximation for del Pezzo surfaces of low degree

16:00 – 16:30 **Coffee break**

16:30 – 17:30 **Damián Gvirtz (University College London)**

The Hilbert Property for Enriques surfaces

- **Friday, September 24th, 2021**

09:15 – 10:15 **Alex Bartel (University of Glasgow)**

Statistics of ray class groups of quadratic number fields

10:15 – 11:00 **Coffee Break**

11:00 – 12:00 **Kevin Destagnol (U Paris Sud, Orsay)**

Local distribution of rational points and the circle method

12:15 – 13:15 **Tal Horesh (ISTA, Klosterneuburg)**

Distribution of primitive lattices and free rational points on the Grassmannian

All talks take place at ESI Boltzmann Lecture Hall!