Diophantine Equations, Combinatorics, Analysis in Number Theory: Emerging Researchers

Thursday 19 – Friday 20 June 2025

The programme is subject to change. All times are British Summer Time (BST).

THURSDAY 19 JUNE	
09.00 – 09.20	Registration and refreshments
09.20 – 09.30	Welcome and housekeeping
09.30 – 10.20	**Lasse Grimmelt**, University of Oxford *Averages of $\mathrm{SL}_2(\mathbb{R})$ Automorphic Kernel and arithmetic applications*
10.25 – 11.15	**Benjamin Bedert**, University of Oxford *Large Sum-free sets via L^1-estimates for trigonometric series*
11.15 – 11.40	Refreshments
11.40 – 12.30	**Rajula Srivastava**, University of Edinburgh *Counting, Curvature and Convex Duality*
12.30 – 14.00	Lunch
14.00 – 14.50	**Nick Rome**, TU Graz *Towards a conjecture of Wooley*
14.55 – 15.45	**Mengdi Wang**, École Polytechnique Fédérale de Lausanne *On Szemerédi 's theorem in sparse sets of primes*
15.45 – 16.15	Refreshments
16.15 – 16.40	**Hrit Roy**, University of Edinburgh *An extension of the Bourgain--Demeter--Guth decoupling theorem*
16.45 – 17.10	**Philip Holdridge**, University of Warwick *Random Diophantine Equations with Prime Variables*
17.10 – 18.00	Welcome reception

FRIDAY 20 JUNE	
09.30 – 09.55	**Jonathan Chapman**, University of Warwick *Counting commuting integer matrices*
10.00 – 10.25	**Firdavs Rakhmonov**, University of St Andrews *Lp averages of the Fourier transform in finite fields: orthogonal projections, incidence geometry, and the restriction problem*
10.30 – 10.55	**Kate Thomas**, University of Oxford *Sums of Niven numbers via the circle method*
11.00 – 11.30	Refreshments
11.30 – 11.55	**Fred Tyrell**, University of Bristol *Bounded Exponential Sums with Multiplicative Coefficients*
12.00 – 12.25	**Sophie Maclean**, King's College London *Energy increment methods in Szemerédi-type theorems*
12.30 – 14.00	Lunch

14.00 − 14.25	**James Cumberbatch**, Purdue University *Smooth Integers with Restricted Digits*
14.30 − 14.55	**Daniel Flores**, Purdue University *K-multimagic squares and magic squares of kth powers via the circle method*
15.00 − 15.25	**Rena Chu**, Duke University *Short character sums evaluated at homogeneous polynomials*
15.30 − 16.00	Refreshments
16.00 − 16.25	**Edna Jones**, Tulane University *On the local-global conjecture for 3-dimensional Kleinian sphere packings*
16.30 − 16.55	**Kiseok Yeon**, University of California, Davis *The global solubility for homogeneous polynomials with random coefficients over thin sets*