

## Wednesday 24th June 2026

**10:00**

**Registration**

Room: Watson Foyer

**10:45**

**Welcome and introductions**

Room: Watson LTA

**Plenary talks**

Room: Watson LTA

Room: Watson LTC

**11:00**

**Jialin Wang (City St George's, University of London)**  
**Algebra**

Blocks, Hochschild cohomology and Lie algebras

**Pedro Cardoso (University of Exeter)**  
**Statistics**

Choosing between interpretable and flexible models in precision medicine

**12:00**

**Lunch**

Room: Basement

**Contributed talks**

Room: Watson LTA

Room: Watson LTC

Room: Watson LTB

**13:00**

**Henry Langer (University of Birmingham)**

Mirror Symmetry and Modular Forms

**Billy Hollis (University of Leeds)**

Non-Classical Methods for the Numerical Solution of Fractional Differential Equations

**Matthew Phillips (University of Birmingham)**

Continuum limits of graph-based joint reconstruction-segmentation

**13:30**

**Linxuan Li (Queen Mary, University of London)**

First steps toward Tropical Minimal Model Program

**James Patterson (University of Birmingham)**

Well-posedness of the MMT model

**Patrick Cahill (Imperial College London)**

Statistical and Lyapunov approximation abilities of Neural ODEs

**14:00**

**Thais Gomes Riberio (University of Birmingham)**

A special family of K3 surfaces with hypergeometric properties

**Joe McCusker (University of Birmingham)**

A heterogeneous nonlocal advection-diffusion system

**Feergus Ball (University of Birmingham)**

Modelling the Spread of Carbapenem-resistant *Acinetobacter baumannii* in an Intensive Care Unit

**14:30**

**Break**

**Rapid Fire**

Room: Watson LTA

**15:00**

**Adarsh Bura (University of Birmingham)** - The shadowing property for  $\beta$ -transformations  
**Patrick Cahill (Imperial College London)** - Statistical and Lyapunov approximation abilities of Neural ODEs  
**Jonathan Hodgson (University of Birmingham)** - Fractal analysis of soot agglomerates  
**Liming Li (University of Warwick)** - Multiscale Modeling of Moving Boundary Dynamics and Phase Transitions in Deep Eutectic Systems  
**Mengna Li (University of Birmingham)** - Numerical Simulation of Single Particle Dissipative Particle Dynamics (sDPD)  
**Kegan Meng (University College London)** - Early Excess Methylation at Disease-Associated CpGs in Endometrial Cancer Inferred from Bulk Tissue  
**Ibraheem Sajid (University of Leeds)** - Zeros of Potts Models  
**Ariba Shakeel (University of Birmingham)** Mathematical Modeling To Understand the Treatment of Adrenal Insufficiency

**Poster Session**

Room: Physics Bridge

**16:00**

**Poster Session and Refreshments can be found on the Physics Bridge**

Join over 20 posters and presenters to discuss their work

**17:30**

**End of day: Closing Remarks**

## Thursday 25th June 2026

**Plenary talks**

Room: Watson LTA

Room:

Room: Watson LTC

**09:00**

**Laura Johnson (University of Bristol)**  
**Combinatorics**

Determining the spectrum of additive triples in the group of integers modulo a prime

**Jesse Taylor-West (University of Bristol)**  
**Fluids**

Volcanic fissure localisation and lava delta formation: Modelling of volcanic flows undergoing rheological evolution

**10:00**

**Comfort Break**

**Contributed talks**

Room: Watson LTA

Room: Watson LTC

Room: Watson LTB

**10:30**

**Krishna Kumar (University of Birmingham)**

Can Mathematics Help Save Olive Trees?

**Mingjie Shen (University of Birmingham)**

Topological Patterns within Limit Order Book data

**Pete Gautam (University of Manchester)**

Groups of maximal class

<b>11:00</b>	<b>Kylie Savoye (University of Birmingham)</b> TBA	<b>Jack Hopkins (University of Birmingham)</b> Risk Neutral Distributions: Estimation in Higher Dimensions	<b>Iris Gilibert (Universitat Politècnica de València)</b> Normal subgroups and degrees of minimal invariant characters
<b>11:30</b>	<b>Thomas Munn (University of Birmingham)</b> From genome sequencing to metabolic modelling and dynamic flux balance analysis extensions	<b>Jacob Asmat (University of Birmingham)</b> Oscillations in Social Opinion: An Agent-Based Approach	<b>John Stokes-Waters (University of Manchester)</b> Valuations on Lattice-Ordered Groups
<b>12:00</b>	<b>Lunch</b>		
	<b>Plenary talk</b> Room: Watson LTA		
<b>13:00</b>	<b>Bethany Woollacott (University of Nottingham)</b> <b>Maths Education</b> Impact in Mathematics Education: From Research Questions to the Real World		
	<b>Contributed talks</b>		
	Room: Watson LTA		Room: Watson LTC
<b>14:00</b>	<b>Harry Bennett (University of Birmingham)</b> Robustness Analysis via Horofunction Compactification		<b>Jonathan Hodgson (University of Birmingham)</b> Fractal analysis of soot agglomerates
<b>14:30</b>	<b>Ash Bhat (University of Birmingham)</b> Constructing non-rectifiable Delone sets		<b>Liming Li (University of Warwick)</b> Multiscale Modeling of Moving Boundary Dynamics and Phase Transitions in Deep Eutectic Systems
<b>15:00</b>	<b>Comfort Break</b>		
	<b>Contributed talks</b>		
	Room: Watson LTA	Room: Watson LTC	Room: Watson LTB
<b>15:30</b>	<b>Maïté Guerin (Imperial College London)</b> Nonlinear Interfacial Stability of Core-Annular Film Flows in Vertical Pipes, including the Effects of Gravity	<b>Josiah Aitchison (Open University)</b> Complexity of Constant Length Substitutions	<b>Yasmin Giles (Lancaster University)</b> The fourth moment problem in quantum probability
<b>16:00</b>	<b>Eva Mokhtari (University of East Anglia)</b> Modelling static capillary phenomena using phase field models: The interaction of wetting potentials with the LBFGS minimiser under pressure and volume constraints.	<b>Richard Howat (University of Birmingham)</b> Structural properties of dynamical survivor sets	<b>Ethan Baker (University of Birmingham)</b> Polynomial Ergodicity of the Generalized Relativistic Langevin Equation
	<b>Panel Q&amp;A</b> Room: Watson LTA		
<b>16:30</b>	<b>Plenary Speakers:</b> Pedro Cardoso, Antonín Češík, Laura Johnson, Blaine Van Rensburg, Jialin Wang, Jesse Taylor-West, Beth Woollacott, Jason Yip		
<b>17:30</b>	<b>End of day: Closing Remarks</b>		

### Friday 26th June 2026

	<b>Plenary talks</b>		
	Room: Old Gym LG10		Room: Old Gym LG12
<b>09:30</b>	<b>Antonín Češík (University of Warwick)</b> <b>Analysis</b> A point is too small: The strength of weak formulations		<b>Blaine van Rensburg (University of Aberdeen)</b> <b>Mathematical Biology</b> Adaptation In Dynamic Environments
<b>10:30</b>	<b>Comfort Break</b>		
	<b>Contributed talks</b>		
	Room: Old Gym LG10		Room: Old Gym LG12
<b>11:00</b>	<b>Kate Hindle (University of St. Andrews)</b> Discovered in the archives: D'Arcy Thompson's recreational mathematics		<b>Ramin Nashebi (University of Birmingham)</b> Mitochondrial Transport Constraints Drive Metabolic Plasticity in SDH-Deficient Cells
<b>11:30</b>	<b>Niamh Brereton (University of Birmingham)</b> Engagement across the years: student insights into the teaching and learning experience of mathematics at university		<b>Linus Chang (University of Birmingham)</b> Ionising Radiation and Mutant Clone Dynamics in the Colonic Epithelium"

**12:00****Lunch****Contributed talks**

Room: Old Gym LG10

Room: Old Gym LG12

Room: Old Gym LG6

**13:00****Adam Keyes (University of Birmingham)**

Supersymmetric Partition Functions on Curved Spaces

**Amy Tierney (University of Birmingham)**Wigner Representations and Weighted  $L^2$  Inequalities for the Fourier Extension Operator to Curves**Debmalya Bandyopadhyay (University of Birmingham)**

Towards Posa's Conjecture for 3-graphs

**13:30****Amir Khodaeian Karim (Imperial College London)**

Adiabatic Invariant Actions for Partially Integrable Systems

**Karim Elmallakh (Loughborough University)** $L_q$  Bounds for Orthonormal Functions on Manifolds with Concave Boundary**Joel Summerfield (University of Birmingham)**

The Classification of Type A Decomposition Classes

**14:00****Arnaud Dumont (University of Birmingham)**

Tangential convergence for elliptic boundary value problems in rough domains

**Shuo Feng (University of Essex)**Reductive pair problem of  $sl_3$ **Plenary Talk**

Room: Aston Webb Dome

**14:45****Jason Yip****History of Mathematics**

From the Mathematical Past to Human Understanding: Why History Matters

**15:45****End of conference**