

09:00	Registration Room: Foyer		
09:45	Welcome and introductions Room: LTA		
	Plenary talks		
	Room: LTA		Room: LTC
10:00	Mathematical Modelling <i>How does a plant grow and respond to its environment? A story across the scales!</i> Euan Smithers, University of Cambridge	ALGEBRA <i>Introduction to twisted conjugacy in groups</i> Gemma Crowe, University of Manchester	
11:00	Comfort Break		
	Contributed talks		
	Room: LTA	Room: LTC	Room: 310
11:15	Character degrees in blocks of symmetric groups Bim Gustavsson, University of Birmingham	Eliciting Some generalisations of Dirichlet distributions as priors for Multinomial models Nayana Unnipillai, Open University	A Novel Mathematical Model of the SLC25A10 Transporter Indicates Operation via a Ping-Pong Mechanism Ramin Nashebi, University of Birmingham
11:45	Reductive pairs arising from representations Shuo Feng, University of Essex	Assessing the Impact of Anti-Seizure Treatments in Network Models of the Brain Peter Kissack, University of Birmingham	Modeling and simulation of viscoelastic liquid crystal elastomers, Rabin Poudel, Cardiff University
12:15	Commuting Involution Graphs for Finite Simple Groups , James Bryden, University of Manchester	Mathematical modelling of a mass-conserving electrolytic cell Georgina Ryan, University of Oxford	Data-driven Mathematical Modelling of the HPA Axis in Humans Belinda Lomdard, University of Birmingham
12:45	Lunch Room: Basement		
	Plenary Talk		
	Room: LTA		Room: LTC
13:30	FLUID MECHANICS <i>Models of cerebrospinal fluid flow and solute transport around the brain</i> Mariia Dvoriashyna, University of Edinburgh	ANALYSIS <i>Quasicrystals, aperiodic order and substitutions</i> Andrew Mitchell, Open University	
14:30	Comfort Break		
	Rapid Fire		
	Room: LTA		
14:45	Modelling & Control of Human Brain Disorders Aran Dabbaghchi, University of Exeter		
14:55	Random Homology – Exposing the Structure Beneath the Chaos Ali Aziz, University of Southampton		
15:05	The Piscopia Initiative: Building Community and Allyship in Mathematics Piscopia Committee, University of Birmingham		
15:15	K-moduli of exceptional del Pezzo hypersurfaces Charlotte Satchwell, University of Essex		
15:25	Bridging Perspectives on the Transition to University: Enhancing the Student Experience in Mathematics HE Niamh Brereton, University of Birmingham		
15:35	Mathematical modelling of a mass-conserving electrolytic cell Georgina Ryan, University of Oxford		
15:45	Comfort Break		
	Contributed talks		
	Room: LTA	Room: LTC	Room: 310
16:00	Generalizing vulnerability in estimating Modern Slavery prevalence Albert Nyarko-Agyei, University of Nottingham	Decomposition Classes Joel Summerfield, University of Birmingham	Tangential convergence and related results for elliptic boundary value problems Arnaud Dumont, University of Birmingham
16:30	From Individuals to Institutions: Agent-Based Insights into Cooperation and Collective Dynamics Jacob Asmat, University of Birmingham	Abelian Ideals of Borel Subalgebras of Lie Superalgebras Samuel Renforth, University of Birmingham	On the convergence of two-dimensional Fourier series Hrit Roy, University of Edinburgh
	Poster Session		
	Room: Physics Bridge		
17:00	Poster Session and Refreshments can be found on the Physics Bridge Join over 20 posters and presenters to discuss their work		
18:00	End of day: Closing Remarks		

	Plenary talks		
	Room: LTA		Room: LTC
09:30	<div>STATISTICS</div> <div>Scale of Harm: Estimating the Prevalence of Trafficking to Facilitate Online Child Sexual Exploitation in the Philippines</div> <div>Rowland Seymour, University of Birmingham</div>	<div>COMBINATORICS</div> <div>Double-jump phase transition for the reverse Littlewood-Offord problem</div> <div>Victor Souza, University of Cambridge</div>	
10:30	Comfort Break		
	Contributed talks		
	Room: LTA	Room: LTC	Room: 310
10:45	<div>High order homoclinic tangencies and universal dynamics for multidimensional diffeomorphisms</div> <div>Dmitrii Mints, Imperial College London</div>	<div>Challenges Faced by Specialist Mathematics Students at the Transition to University: Insights from across the UK.</div> <div>Niamh Brereton, University of Birmingham</div>	<div>A Vine Copula-Embedded Spatio-Temporal Framework for Stochastic Multisite Precipitation Modelling Across Local and Regional Scales</div> <div>Edward Chida, University of Greenwich</div>
11:15	<div>Dichotomies respect to growth rates and their spectra</div> <div>Néstor Jara, University of Chile (visiting Imperial College London)</div>	<div>A Variational Derivation of Shallow Water Equations with Full Rotation Vector</div> <div>James Arthur, University of Exeter</div>	<div>Feature selection and parameter inference with sparsely sampled data via an L1-penalty and global optimization</div> <div>Rahma Abdulahi, University of Birmingham</div>
11:45	<div>Cut and Project Sets in Hyperbolic Space</div> <div>Richard Alasdair Howat, University of Birmingham</div>	<div>Big-steps in mathematical operational semantics</div> <div>Pouya Partow, University of Birmingham (School of Computer Science)</div>	<div>Dynamical models for evaluating long-term epilepsy surgery outcomes</div> <div>Gwen Harrington, University of Birmingham</div>
12:15	Lunch		
	Room: Basement		
	Plenary talks		
	Room: LTA		
13:00	<div>MATHEMATICS EDUCATION</div> <div>"Somebody needs to tell them...don't be afraid, nobody will judge you" – My journey into a career in mathematics education</div> <div>Holly Gilbert, Coventry University</div>		
14:00	Comfort Break		
	Contributed talks		
	Room: LTA	Room: LTC	Room:310
14:15	<div>Pricing Asian option under mean reversion and jumps, based on Fast Fourier Transform, Artificial Neural Networks and Deep Learning methods</div> <div>Kimaro Kiaruntu, University of Essex</div>	<div>Discrete Morse Theory - the Art of Reduction</div> <div>Ali Aziz, University of Southampton</div>	<div>Maximal Intersecting Families: A Simple Double Exponential Bound</div> <div>Allan Flower, University of Birmingham</div>
14:45	<div>Modelling & Control of Human Brain Disorders</div> <div>Aran Dabbaghchi, University of Exeter</div>	<div>K-moduli of exceptional del Pezzo hypersurfaces</div> <div>Charlotte Satchwell, University of Essex</div>	<div>Positive codegree thresholds for Hamilton cycles</div> <div>Camila Zárate-Guerén, University of Birmingham</div>
15:15	<div>Asymptotic and Numerical Analysis of Cortisol Infusion Protocols for Adrenal Insufficiency</div> <div>Ariba Shakeel, University of Birmingham</div>	<div>The spherical Mukai conjecture</div> <div>Heath Pearson, University of Nottingham</div>	<div>Every Graph is Essential to Large Treewidth</div> <div>Pedro Buero Villafana, University of Leeds</div>
15:45	Comfort Break		
	Plenary Talk		
	Room: LTA		
16:00	<div>HISTORY OF MATHEMATICS</div> <div>On meeting the challenge (or not). English responses to Fermat's questions on number theory in the later seventeenth-century</div> <div>Philip Beeley, University of Oxford</div>		
17:00	End of conference		