

Timetable

Monday

16:00 – 16:30	Tea
16:30 – 16:40	Welcome
16:40 – 17:30	Aston : Statistics, science and government: a statistician as a CSA
17:30 – 18:00	Jobbins : Molecular dynamics & enhanced sampling techniques for materials discovery
18:00 – 18:30	Mughal : We are all Scutoids: a brand-new shape, explained
19:00	Dinner

Tuesday

8:00	Breakfast
9:00 – 9:50	Aston : Functional data in constrained spaces
9:50 – 10:20	Pachon : On random graphs and complex networks
10:20 – 10:50	Torras Casas : Persistent homology distribution via spectral sequences
10:50 – 11:30	Coffee
11:30 – 12:20	Heath-Brown : Diophantine equations
12:20 – 12:50	Fretwell : Roots of sextic polynomials mod p : Serre's dream.
13:00	Lunch
14:10 – 15:00	Derks : Stationary and travelling waves in semi-linear wave equations

Afternoon parallel sessions I

Lecture room 1

15:00 – 15:20	Richardson : Lie groups and twisted K-theory
15:20 – 15:40	Punkumkerd : Introductorily basic knowledge for generalized Stirling operators, with applications
15:40 – 16:00	Papworth : Hochschild cohomology of trusses & affine Nijenhuis operators

Lecture room 2

15:00 – 15:20	Corradini : Kernel embeddings for sparse angular-measure approximation
15:20 – 15:40	Sadeghi Namaghi : Least squares PGD methods for solving elliptic PDEs
15:40 – 16:00	Hergibo: A quadtree-based adaptive moment-of-fluid method for interface reconstruction with filaments
16:00 – 16:30	Tea

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Afternoon parallel sessions II

Lecture room 1

- 16:30 – 16:50 Doherty : Axisymmetric viscoelastic multiphase flow and its application to rising gas bubbles
- 16:50 – 17:10 Alghamdi : Fractional differential models for viscoelastic fluids
- 17:10 – 17:30 Deadman : Rack n Roll: linearisations of quandles to R-matrices and how rack isomorphisms interplay with equivalence of solutions to the Yang-Baxter equation
- 17:30 – 17:50 Hutchings : Sequential sampling strategies for the Nyström approximation of large symmetric positive-semidefinite matrices
- 17:50 – 18:10 Bufton : Omega-shift representations of the infinite braid group
- 18:10 – 18:30 Ramzan : Applications of heat transport in vacuum pump oil in applied mathematics

Lecture room 2

- 16:30 – 16:50 Jameel : The eigenvalues of Dirac operators
- 16:50 – 17:10 Gwynne : Isoperimetric solutions of a single region in 1-D and 2-D spaces with density
- 17:10 – 17:30 Adukova : Is it possible to solve the factorisation problem of matrix functions exactly?
- 17:30 – 17:50 Hogan : New bounds for the integer Caratheodory rank
- 17:50 – 18:10 Sahjwani : Stability of Alexandrov-Fenchel inequalities in the hyperbolic space.

19:00 Dinner

Wednesday

- 8:00 Breakfast
- 9:00 – 9:50 Derks : Existence and stability of fronts in inhomogeneous wave equationsL
- 9:50 – 10:20 Liu : Optimal self-protection and insurance design under contagious cyber risks
- 10:20 – 10:50 Chargaziya : Differential equations in a scale of Hilbert spaces
- 10:50 – 11:20 Coffee
- 11:20 – 11:50 Gagarin : Weighted domination models and randomized heuristics
- 11:50 – 12:40 Heath-Brown : Counting solutions of Diophantine equations
- 13:00 Lunch