

## Tuesday 14th July 2020

9.30-9.50	Welcome session		
10.00-10.50	On convergence of Fourier integrals Jonathan Hickman (Plenary Speaker)	Microscale to macroscale in suspension mechanics Adam Townsend (Plenary Speaker)	
10.55-11.30	Group networking session		
11.35-12.00	Strong components of random digraphs from the configuration model: the barely subcritical regime Matthew Coulson	Blocks of finite groups of tame type Norman MacGregor	The evolution of a three dimensional microbubble in non-Newtonian fluid Eoin O'Brien
12.10-12.35	Large trees in tournaments Alistair Benford	Donovan's conjecture and the classification of blocks Cesare Giulio Ardito	Order from disorder: chaos, turbulence and recurrent flow Edward Redfern
Lunch break			
14.00-14.50	Ryser's conjecture and more Liana Yepremyan (Plenary Speaker)	MorphoMecanX: mixing (plant) biology with physics, mathematics and computer science Gabriella Mosca (Plenary Speaker)	
14.55-15.30	Beginning a Career in Academia (Panel session)		
15.35-16.00	Frobenius manifolds in mathematics and beyond Karoline van Gemst	N-centred Lipschitz Quotient Mappings Ricky Hutchins	Layered Bayesian Learning given Highly Discontinuous Data - Application to Materials Science Georgios Stagakis
16.10-16.35	Describing the associated order in a Hopf Galois structure of extensions of p-adic fields Daniel Gil Munoz	Limit points of Mahler measures coming from digraphs Joshua Coyston	Analysis of temperature and humidity in Oman using modern statistical method Safia Al Marhoobi
16.45-17.10	Distances to and the sparsity of lattice points in rational polyhedra Aled Williams		Symmetric projection attractor reconstruction: Multi-dimensional embedding of physiological signals Jane Lyle

## Wednesday 15th July 2020

10.00-10.50	The normal Hausdorff spectrum of pro-p groups Anitha Thillaisundaram (Plenary Speaker)	Optimization Challenges in the Commercial Aviation Sector Jaroslav Fowkes (Plenary Speaker)	
10.55-11.30	Networking shuffle		
11.35-12.00	An algebraic Brascamp-Lieb inequality Jennifer Duncan	Commutativity with permitting n-derivations of semiprime rings Mehsin Jabel Atteya	From device to code: Optical physically unclonable functions Elliott Ball
12.10-12.35	Sparse T1 theorems Gianmarco Brocchi	Drinfeld twists and rational Cherednik algebras Edward Jones-Healey	Coupled nonlinear Schrodinger equations and their applications to nonlinear mechanical topological insulators David Snee
Lunch break			
14.00-14.50	Problems session		
15.00-15.45	News from the MAGIC Taught Course Centre (Panel Session)		
16.00-16.25	Monochromatic cycle partitioning Vincent Pfenninger	What is Homomorphic Encryption and why is it so noisy? Erin Hales	Exact and approximate approaches for stochastic receptor-ligand competition dynamics Polly-Anne Jeffrey
16.35-17.00	Almost all optimally coloured complete graphs contain a rainbow Hamilton path Stephen Gould	The foundations of infinite-dimensional spectral computations Matthew Colbrook	Population model approximations of dynamics on networks Alice Tapper
17.10-17.35			Creasing of an incompressible, isotropic, hyperelastic material in uni-axial compression: an analytical study Dominic Emery
17.45-18.00	Closing session		