

Sheffield SIAM-IMA Applied Mathematics and Statistics Conference 2021 Schedule



Day 1: 27/07		Day 2: 28/07	
09.15 - 09.25	Opening remarks, Prof. Nick Monk, Head of School of Mathematics and Statistics, University of Sheffield, and Bryony Moody, President of Sheffield SIAM-IMA Student Chapter	09.00 - 09.15	Agnesa Smajli (Sheffield City College) Title: International Trade and Economic Growth in the Balkans
		09.15 - 09.30	Millie Tobin (Manchester Metropolitan University) Title: Multifractal Analysis for Financial Time Series
09.25 - 09.30	9.25-9.30 Erica Tyson, Institute for Mathematics and its Applications, Membership of the IMA	09.30 - 09.45	Lorena Radavci (Sheffield City College) Title: Modelling and Forecasting Volatility in Stock Markets using GARCH Models: A Comparison between Emerging and Developed Economies
09.30 - 10.00	Dr Gregory Chaplain (Imperial College London) Title: Elastic Metasurfaces	09.45 - 10.00	Short break
10.00 - 11.00	Keynote 1: Dr Silvia Gazzola (University of Bath) - Iterative Regularisation Methods for Large-Scale Inverse Problems	10.00 - 11.00	Keynote 3: Dr Konstantinos Zygalakis (University of Edinburgh) - Bayesian inverse problems, prior modelling and algorithms for posterior sampling
11.00 - 11.15	Short break	11.00 - 11.30	Savvas Melidonis (Heriot-Watt University) Title: MCMC methods for Image Restoration
11.15 - 11.45	Dr Malena Sabaté Landman (Cambridge) Title: Flexible Krylov methods for inverse problems	11.30 - 11.45	Sam Armstrong (University of Sheffield) Title: An Agent-Based Model of Food Web Evolution
11.45 - 12.00	Tommy Moorcroft (University of Salford) Title: The Ablowitz-Ladik equation, discrete ring cavity system and pattern formation	11.45 - 12.00	Short break
12.00 - 12.30	Dr Robert Shaw (University of Sheffield) Title: Finite basis sets in quantum chemistry	12.00 - 12.30	Dr Valeria Giunta (University of Sheffield) Title: Aggregation phenomena and transition to chaotic dynamics in a chemotaxis model of acute inflammation
12.30 - 13.00	Lunch (online) - meet and play games	12.30 - 13.00	Perna Singh (University of Sheffield) Title: Resist the disease or tolerate it?
13.00 - 13.30	Erin Russell (University of Bristol) Title: Inverse Eigenvalue Problems for Special Stochastic Matrices	13.00 - 13.15	Chloe Schooling (University of Sheffield) Title: Tensor electrical impedance myography of the tongue in amyotrophic lateral sclerosis identifies the impedance signature of disease progression
13.30 - 14.00	Alex Trenam (University of Bath) Title: Topology Optimisation Of Structural Electrolyte Microstructures Using A Topological Sensitivity And Level-set Approach	13.15 - 13.55	Lunch (online) - meet and play games
14.00 - 14.15	Short break	13.55 - 14.00	Nada Baessa (King's College London) Title: Visualising Complex Networks
14.15 - 14.30	Rose Archer (University of Sheffield) Title: Emulating the Last Eurasian Ice Sheet	14.00 - 14.15	Praveen Shahani (Amity University) Title: Mathematics of Reinforcement Learning and its Applications
14.30 - 15.00	Bryony Moody (University of Sheffield) Title: The evolution of radiocarbon dating: Why model choice matters	14.15 - 14.45	Farhana Akond Pramy (Open University) Title: A computer-assisted proof of dynamo growth in the stretch-fold-shear map
		14.45 - 15.00	Short break
15.00 - 16.00	Keynote 2: Dr Aretha Teckentrup (University of Edinburgh) Title: Convergence and Robustness of Gaussian Process Regression	15.00 - 16.00	Keynote 4: Dr Matthew Allcock (EDF) Title: Extreme statistics: protecting nuclear power stations from natural disasters
16.00 - 16.05	Short break	16.00 - 16.30	Dr Jude Ekeh (University of Sheffield) Title: Mathematical Optimisation Approaches for Energy Systems
16.05 - 16.35	Victoria Sánchez Muñoz (NUI Galway) Title: Nash Equilibria in certain two-choice multiplayer games played on the ladder graph	16.30 - 17.00	Raphael Fortulan (Sheffield Hallam University) Title: Nonlinear Stability Analysis in Power Systems with Renewable Energy Sources
16.35 - 16.55	Abhimanyu Pallavi Sudhir (Imperial College London) Title: A mathematical definition of property rights	17.00 - 17.30	Yang Zhou (Tina) (University of Bath) Title: Deep Learning models in confronting ADAPT and satellite observations.
16.55 - 17.00	Short break	17.30 - 18.00	Abdulrahman Albidah (University of Sheffield) Title: A novel approach to identify magnetohydrodynamic (MHD) wave modes in sunspots
17.00 - 18.00	Careers in Industry for mathematicians and statisticians (panel and Q&A)	18.00 - 19.00	Pub quiz