

Thursday 12 February (morning session)

8:40 – 9:40	Plenary talk : Mary Silber Resilience in drylands: landscape-scale, self-organized vegetation patterns <i>Chair : Hinke Osinga</i>				
	Room 1 and 2 <i>Chair :</i> <i>Alys Clark</i>	Room 3 <i>Chair:</i> <i>Edward Bissaker</i>	Room 4 <i>Chair:</i> <i>Simon Clarke</i>	Room 5 <i>Chair :</i> <i>Melanie Roberts</i>	Room 6 <i>Chair :</i> <i>Pantea Pooladvand</i>
9:40 – 10:00	Thomas Williams Modelling the growing outer membrane of Gram-negative bacteria	Patrick Grant Timber in Trouble: Predicting Failure in Engineered Wood Products	Zachary James Wegert Next-generation computational design with unfitted finite elements and automatic shape differentiation	Winston Sweatman Birds, Fish and Finding Nice Shapes	Roslyn Hickson Estimation of <i>Aedes albopictus</i> abundance based on a dengue outbreak in Australia
10:00 – 10:20	Stuart Johnston Quantifying biological heterogeneity in nano-engineered particle-cell interaction experiments	Edoardo Fabbrini A Variational Formulation for Plane-Strain Elasticity with Topological Defects	Paul Charles Leopardi Rigorous numerical analysis in the age of vibe coding: case studies	Elise Mills Thermal performance curve models calibrated to ecological data using Sequential Monte Carlo sampling: an application to Antarctic moss photosynthesis	Richard Creswell Inferring duration of seropositivity from infection prevalence and seroprevalence survey data
10:20 – 10:40	Adrienne Jenner In silico trial of a cancer treatment combing a virus and an immune "magnet"	Daniel J Netherwood Towards a model for growth-induced wrinkling in thin elastic sheets	Judith Bunder Efficient 'equation-free' simulations of elastic beams	Tomoharu Suda From time series to dynamics: a categorical perspective	Tiffany Leung Estimating the impact of a school-based live-attenuated influenza vaccination program in Australia: a modelling study
10:40 – 11:00	Ryan Murphy A coarse-grained mathematical model for colorectal crypt dynamics	Steve Taylor MINZ, protein power drinks and traffic flow	Kazuki Koga Weak comparisons between compact surfaces	Gary Froyland Optimising climate sensitivity: an El-Nino Southern Oscillation case study	Alexandra Hogan Mathematical modelling of endemic SARS-CoV-2 transmission and implications for vaccination strategies
11:00 – 11:30	Morning tea - Grand Ballroom				
11:30 – 12:30	Plenary talk : Boris Baeumer Randomising time: A Foray into a Non-Markovian World <i>Chair : Yvonne Stokes</i>				
12:30 – 13:00	Closing ceremony				
13:00 – 14:00	Lunch - Grand Ballroom				