

Ballroom (all) - Thu

Mathematical Biology

- ▶ 09:40 Matthew Faria (The University of Melbourne)
Quantitative assessment of targeted therapeutics and cells
- ▶ 10:00 Claire Miller (The University of Auckland)
Cell invasion in endometriosis
- ▶ 10:20 James Mark Osborne (The University of Melbourne)
An adaptive numerical method for multicellular simulations of organ development and disease
- ▶ 11:00 Michael Greg Watson (University of New South Wales)
Investigating Necrotic Core Localisation with a Spatial-Temporal-Structural Model of Early Atherosclerotic Plaque Formation
- ▶ 11:20 Jessica Crawshaw (University of Oxford)
The role of hierarchical Bayesian inference in understanding macular degeneration treatment strategies
- ▶ 11:40 Michael Pan (The University of Melbourne)
Computational modelling of metabolism within the ageing heart

Plenary Talk

- ▶ 12:00 Plenary talk 8

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Mathematical Epidemiology

- ▶ 09:40 Michael Meehan (James Cook University)
Replicating superspreader dynamics with simple epidemic models
- ▶ 10:00 Kylie Ainslie (Dutch National Institute of Public Health and the Environment (RIVM))
Determining the trade-offs between different COVID-19 control strategies in the Netherlands: a counterfactual analysis
- ▶ 10:20 Kylie Ainslie (Dutch National Institute of Public Health and the Environment (RIVM))
A scenario modelling analysis to anticipate the impact of COVID-19 vaccination in adolescents and children on disease outcomes in the Netherlands, summer 2021
- ▶ 11:00 Emily Harvey (The University of Auckland)
Modelling spread of SARS-CoV-2 to household contacts and the impact of household quarantine and testing
- ▶ 11:20 Joel Miller (La Trobe University)
The impact of a single individual in an epidemic
- ▶ 11:40 Andrew Black (The University of Adelaide)
Efficient estimation of epidemic final size probabilities

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Partial Differential Equations

- ▶ 09:40 Mark Joseph McGuinness (Victoria University of Wellington)
Reflections at the interface
- ▶ 10:00 Bronwyn Hajek (University of South Australia)
Time-dependent solutions of a Fisher-KPP-like equation
- ▶ 10:20 Hiroshi Takase (Kyushu University)
Inverse problems for first-order hyperbolic equations

Fluid Dynamics

- ▶ 11:00 Rahil Valani (The University of Adelaide)
Inertial particle focusing in curved ducts: Bifurcations and dynamics
- ▶ 11:20 Brendan Harding (Victoria University of Wellington)
Inertial migration of spherical particles in curved ducts at moderate Dean numbers

Mathematical Biology

- ▶ 11:40 Matthew Cody Nitschke (The University of Sydney)
Male-biased mating sex ratios and the evolution of human pair bonds

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Mathematical Ecology and Conservation

- ▶ 09:40 Douglas Brumley (The University of Melbourne)
The role of bacterial chemotaxis in microbial symbiosis

Mathematical Biology

- ▶ 10:00 Jiahao Diao (The University of Melbourne)
Modelling gene content across a phylogeny to determine when genes become associated

Mathematical Ecology and Conservation

- ▶ 10:20 Morenikeji Deborah Akinlotan (Queensland University of Technology)
Beyond expected values: Making environmental decisions using value of information analysis when measurement outcome matters
- ▶ 11:00 Christopher Baker (The University of Melbourne)
Modelling species abundance and dynamics using removal data
- ▶ 11:20 Melanie Roberts (Australian Rivers Institute, Griffith University)
Introducing HARP - A new metric to describe hysteresis
- ▶ 11:40 Bree Martin (The University of Queensland)
Bayesian belief network modelling for the Great Barrier Reef