

AMSI OPTIMISE 2018 PROGRAM

	Day 1 - Optimisation Under Risk	Day 2 - Disaster Management	Day 3 - Optimisation Practice	Day 4 - Workshops	Day 5 - Workshops
	MONDAY 18 JUNE	TUESDAY 19 JUNE	WEDNESDAY 20 JUNE	THURSDAY 21 JUNE	FRIDAY 22 JUNE
0800 - 0830	Opening Business Breakfast sponsored by Biarri University House at The Woodward Welcome to be delivered by: Professor Geoff Prince, AMSI, Professor Kate Smith-Miles, The University of Melbourne, Professor Peter Taylor, ACEMS Opening remarks by Joe Forbes , Biarri				
0830 - 0900					
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0930 - 1000	RELOCATE	Plenary: Applied network design problems to support humanitarian operations Associate Professor Marie-Ève Rancourt HEC Montréal	Plenary: OR Inside Associate Professor Maria Antónia Carravilla Faculdade de Engenharia da Universidade do Porto, Portugal	9.15am start (45 mins) National Plenary: Optimal Control for Computing Carbon Prices Professor Christopher Kellett University of Newcastle	9.15am start (45 mins) Invited Speaker: Tactical Network Planning for Food Aid Distribution in Kenya Associate Professor Marie-Ève Rancourt HEC Montréal
1000 - 1030	Plenary: Risk and Reliability in Optimization Under Uncertainty Professor Emeritus R. Tyrrell Rockafellar University of Washington, USA	Burning down stereotypes Craig Brownlie Country Fire Association	Case Study (Introduction): Redesigning medical wards by optimally allocating specialties to minimize outliers Dr Vicky Mak-Hau , Deakin University	Decision-making under severe uncertainty: from worst-case analysis to robust optimization Dr Moshe Sniedovich , The University of Melbourne	Optimising the resilience of road networks under uncertainty Arash Kaviani , The University of Melbourne
1030 - 1100		MORNING TEA	MORNING TEA	MORNING TEA	MORNING TEA
1100 - 1130	Uncertainty and Monetary Policy in Good and Bad Times Dr Gabriela Nodari Reserve Bank Australia	Industry Challenge: Disaster Management and Public Safety Black Swans and Perfect Storms: Challenges in disaster management and resilience research, Professor Greg Foliante Critical incidents and next generation public safety, Ged Griffin Centre for Disaster Management and Public Safety (CDMPS)	Hands-On Session: Solving a logistics distribution problem using mixed integer programming and mathheuristics Dr Alysson Costa , The University of Melbourne & Pedro B. Castellucci , The University of Melbourne and University of São Paulo	Recursive Evaluate and Cut David Hemmi , Monash University / Data61	Post-disaster Humanitarian Logistics Pamela Cortez , Universidade Estadual de Feira de Santana (Brazil) and The University of Melbourne
1130 - 1200	Reconstruction of missing data by optimal transport: applications in finance Professor Gregoire Loeper , Centre for Quantitative Finance and Investment Strategies, Monash University			A fixed point operator in discrete optimisation duality Professor Andrew Eberhard , RMIT	Optimal Control of a UAV in Search and Rescue Operations Dr Yalçın Kaya , University of South Australia
1200 - 1230	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
1230 - 1300					
1300 - 1330					
1330 - 1400			Curve clustering using Chebyshev and Least Squares approximation Dr Nadia Sukhorukova , Swinburne University of Technology and Federation University Australia	Sparsity optimization for a network of coupled oscillators Associate Professor Regina Burachik , University of South Australia	
1400 - 1430	Predictability, and its Discontents Dr Darryn Reid Defence Science and Technology Group	Optimisation and quantitative risk opportunities in preparedness, mitigation and emergency management Dr Simon Dunstall CSIRO Data61	1415-1500 Optimisation in the Darkness of Uncertainty: When you don't know what you don't know, and what you do know isn't much! (45 mins) Professor Kate Smith-Miles , The University of Melbourne	Reducing post-surgery recovery occupancy under uncertainty Dr Belinda Spratt , Queensland University of Technology	Quantifying expert judgement in an objective function for table-balancing Dr Geoffrey Brent , Australian Bureau of Statistics
1430 - 1500					
1500 - 1530	AFTERNOON TEA	AFTERNOON TEA	AFTERNOON TEA	AFTERNOON TEA	AFTERNOON TEA
1530 - 1600	Industry Challenge: Plan, React, Repeat Alan Dormer Opturion	Hands-On Session: Influence Charts Associate Professor Maria Antónia Carravilla Universidade do Porto, Portugal	Case Study Continued Workshop Dr Vicky Mak-Hau Deakin University	Augmented Benders' Decomposition for Synchromodal Logistics Andrew Perryman , Monash University	A comparison of nonlinear, second order cone and linear programming formulations for the optimal power flow problem Jose Nicolas Melchor Gutierrez , Sao Paulo State University & The University of Melbourne
1600 - 1630					
1630 - 1700	Day 1 Wrap Up		Case Study Continued Solutions Presentation Dr Vicky Mak-Hau , Deakin University	An algorithm for the network flow problem with multi-transport modes and time window constraints Chaojie (Jasmine) Guo , The University of Melbourne	Process Plant Layout Optimization: Equipment Allocation Dr Gleb Belov , Monash University
1700 - 1730		RELOCATE	APR.Intern Poster Presentations		
1730 - 1930					