AMSI Workshop on Mathematics of Transportation Networks 2013, Melbourne

## Programme

## Tuesday 18th June 2013

17:30	Reception	
18:00	Mark Wallace (Monash University and Opturion) Public Lecture: <i>Cheap solutions to the transport problem</i>	
Wednesday 19th June 2013		
8:45	Coffee – Registration	
9:15	Welcome	
9:30	Serge Hoogendoorn (Delft University of Technology) A primer in traffic flow modeling and management	
10:30	Coffee break	
11:00	William Moase (The University of Melbourne) A distributed real-time optimisation approach suited to traffic signalling	
11:35	Tung Le (Swinburne University of Technology) Linear-quadratic model predictive control for urban traffic networks	
12:10	Hai Vu (Swinburne University of Technology) Real-time route guidance in stochastic networks	
12:45	Lunch	
13:45	Adrian George (VicRoads) Managing traffic flow on urban road networks	
14:20	Mohsen Songhori (The University of Melbourne) Implications of patterned interactions in complex systems for the structure of decision making orga- nization	
14:55	Kelvin Goh (Monash University) A mixed logit modelling approach to investigating at-fault accidents	
15:30	Coffee break	
16:00	Travis Waller (The University of New South Wales) Transport network equilibrium models incorporating adaptivity and volatility	
17:00	Close	

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## Thursday 20th June 2013

9:15	Coffee break
9:30	Pascal Van Hentenryck (NICTA) Optimization over transportation networks
10:30	Coffee break
11:00	Jan Richter (IBM) Modelling and simulation of bushfire evacuation scenarios with refuge options
11:35	Amir Sobhani (Monash University) Road safety modelling using a safety analysis chain: A theoretical discussion
12:10	Jörg Fliege (University of Southampton) Some new approaches in bilevel optimization
12:45	Lunch
13:45	Michael Rigby (The University of Melbourne) An opportunistic client user interface to support centralized ride share planning
14:20	Andreas Ernst (CSIRO) Rail scheduling for the hunter valley coal chain
14:55	Stephan Winter (The University of Melbourne) Collaborative transportation: a case for computational transportation science
15:30	Coffee break
16:00	Jürg von Känel (IBM) Large scale traffic modelling from city planning to emergency evacuations
17:00	Vinayak Dixit (The University of New South Wales) Behavioural foundations of two-fluid model for urban traffic
17:35	Mathematicians in Schools (Gill Lunniss)
18:00	Reception
18:30	Conference dinner (Monash University Club, Clayton Campus, Building 50)

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## Friday 21st June 2013

9:15	Coffee break
9:45	Katsuhiro Nishinari (The University of Tokyo) Jamology - traffic jams of self-driven particles
10:45	Coffee break
11:20	Allison Kealy (The University of Melbourne) A distributed real-time optimisation approach suited to traffic signalling
11:55	Heng-Soon Gan (The University of Melbourne) Coordinated emergency evacuation
12:30	Tim Garoni (Monash University) A comparative study of Macroscopic Fundamental Diagrams of arterial road networks governed by adaptive traffic signal systems
13:05	Lunch
14:10	David Shteinman (The Australian Centre for Commercial Mathematics at UNSW) Three case studies of traffic flow modelling with real traffic data
14:45	Lele Zhang (Monash University) Traffic disruption and recovery in road networks
15:20	Coffee break

- 15:55 Majid Sarvi (Monash University) A quantitative measure for the lifetime analysis of transport networks
- 16:55 Closing remarks