Day 1 – Tuesday 12 October - Applications in Logistics and Networks

Official Opening
8:30-8:40  Gary Ferris (I&INSW)
8:40-8:50  Tony Guttmann (Director of MASCOS)
8:50-9:00  Tony Dooley (Head of the School of Mathematics and Statistics, UNSW)

9-9:45  Martin Grötschel (Zuse Institute Berlin and TU Berlin)
       Online problems and logistics
9:45-10:15  Ross Halgren (Haltec Enterprises)
           NBN capacity requirements
10:15-10:45  Therese Keane (DSTO)
            Scheduling in amphibious operations

10:45-11:15  Morning Tea

11:15-11:45  Jerzy Filar (Univ. South Australia)
           A Markov chain inspired view of the hamiltonian cycle and travelling salesman problems
11:45-12:15  Martin Savelsbergh (CSIRO)
            The multi-depot vehicle routing problem: an integer programming-based heuristic

12:15-2:00  Lunch

2:00-3:30  Workshop Discussion

3:30-4:00  Afternoon Tea

4:00-5:00  Workshop Discussion
Day 2 – Wednesday 13 October - Applications in Mining and Supply Chains

9-9.45  Gary Froyland (UNSW)
Optimization in mining projects: strategic planning and uncertain information

9.45-10.15  Jorge Amaya (Univ. Chile)
Discrete and continuous mathematical formulation for the open pit mine planning problem

10.15-10.45  Nelson Morales (Univ. Chile)
Short-term open pit planning with blending constraints

10.45-11.15  Morning Tea

11.15-11.45  Pierre Nancel-Penard (Univ. Chile)
The open pit mine production scheduling problem with multiple destinations

11.45-12.15  Natashia Boland (Univ. Newcastle)
The Hunter Valley coal export supply chain

12.15-12.45  Christina Burt (Univ. Melbourne)
Modelling the equipment selection problem for surface mines using MIP

12.45-2.00  Lunch

2.00-5.00  Combined Workshop Discussion, afternoon tea and iCinema UNSW Virtual Reality Mine tour at 2 venues:
iCinema Scientia AVIE (AVIE - Advanced Visualisation and Interaction Environment) facility: UNSW
AVIE Unit and iDome: School of Mining: UNSW
Day 3 – Thursday 14 October - Applications in Transport

9-9.45  Ralf Borndörfer (Zuse Insitute Berlin and Löbel, Borndörfer & Weider GbR)  
*Optimization in public transportation*

9.45-10.15  Phil Howlett (Univ. South Australia)  
*Estimating the robustness of train plans for single-line corridors with crossing loops*

10:15-10.45  Thomas Schlechte (Zuse Institute Berlin)  
*Railway track allocation*

10.45-11.15  Morning Tea

11.15-11.45  Stephen Watt (Univ. Western Ontario & Descartes Systems Group, Canada)  
*Routing and scheduling challenges for a service provider*

11:45-12.15  Guoqing Zhang (Univ. Windsor, Canada)  
*The multi-period constrained newsboy problem with supplier discounts*

12.15-12.45  Kevin White (Univ. South Australia)  
*Integer linear programming models for rescheduling of air traffic*

12.45-2.00  Lunch

2:00-3.30  Workshop Discussion

3:30-4.00  Afternoon Tea

4:00-5.00  Workshop Discussion
Day 4 – Friday 15 October - Modelling and solver software with a transport network case study

9-9.45  Thorsten Koch (Zuse Institute Berlin)
State of the art in integer programming and extensions

9.45-10.15  Timo Berthold (Zuse Institute Berlin)
SCIP – solving constraint integer programs

10:15-10.45  Stefan Heinz (Zuse Institute Berlin)
Applications of constraint integer programming

10.45-11.15  Morning Tea

11.15-11.45  Mark Wallace (Univ. Monash)
Accelerating search using constraint programming

11:45-12.15  Stefan Vigerske (Humboldt University)
Extending SCIP towards MINLP

12:15-12.45  Ambros Gleixner (Zuse Institute Berlin)
Applications of non-convex MINLP

12.45-2.00  Lunch

2.00-2.30  Jesco Humpola (Zuse Institute Berlin)
Putting it all together: optimizing petroleum gas transport networks

2.30-3.30  Workshop Discussion

3.30-4.00  Afternoon Tea

4.00-5.00  Workshop Discussion

5.00pm  Workshop Closes
Combined Workshop Discussion, afternoon tea and iCinema UNSW Virtual Reality Mine tour at 2 venues:

Discrete and continuous mathematical formulation for the open pit mine planning problem