

Probabilistic and Extremal Combinatorics Downunder

Monash University, 13-17 June 2016

Final Schedule

Monday 13 th June	
9:50-10:00	Opening remarks
10:00-11:00	Noga Alon Structure, randomness and universality
11:00-11:30	Coffee break
11:30-12:10	David Conlon Finite reflection groups and graph norms
12:15-12:55	Andrew Thomason Solutions to linear equations
12:55-1:55	Lunch
2:15-2:40	Guillermo Pineda-Villavicencio The excess degree of a polytope
2:40-3:05	David Yost Lower bounds for general polytopes
3:05-3:30	Brendan McKay Complex martingales and combinatorial enumeration (Part 1)
3:30-3:55	Mikhail Isaev Complex martingales and combinatorial enumeration (Part 2)
3:55-4:25	Coffee break
4:25-5:05	Catherine Greenhill The average number of spanning trees in sparse graphs with given degrees

Tuesday 14 th June	
10:00-10:40	Amin Coja-Oghlan Core forging by warning propagation
10:40-11:10	Coffee break
11:10-11:50	Jim Fill A local limit theorem for QuickSort key comparisons via multi-round smoothing
11:55-12:20	Stephen Mildenhall On subgraph containment probabilities for random graphs of given degree sequence
12:20-1:00	Colin McDiarmid Clique colourings of random graphs
1:00-2:00	Lunch
2:00-2:25	Greg Markowsky Foster's network theorems on finite and infinite graphs and connections to random walks
2:25-2:50	Tamas Meszaros A conjecture on shattering-extremal set systems
2:50-3:15	Ben Barber Edge decompositions of graphs
3:15-3:45	Coffee break
3:45-4:25	Michael Drmota Subgraph counting in series-parallel graphs and infinite dimensional systems of functional equations
4:30-5:10	Problem session

Wednesday 15 th June	
9:00-9:40	Lutz Warnke The phase transition in the random d-process
9:40-10:10	Coffee break
10:10-10:50	Angelika Steger Local resilience for squares of almost spanning cycles in sparse random graphs
10:55-11:35	Tomasz Luczak Hypergraphs, randomness, and a touch of topology
11:40-12:30	Lunch
12:30-6:15	Excursion

Thursday 16 th June	
9:00-9:40	Penny Haxell Matchings and covers in 3-uniform hypergraphs
9:45-10:20	Richard Brent and Judy-anne Osborn Probabilistic lower bounds on maximal determinants of binary matrices
10:20-10:50	Coffee break
10:50-11:30	Alexandr Kostochka Refining old results on disjoint and longest cycles in graphs
11:35-12:15	Dhruv Mubayi New developments in hypergraph Ramsey theory
12:20-12:45	John Goldwasser Maximum density of copies of a subgraph in the n-cube
12:45-1:45	Lunch
2:00-2:40	Michael Krivelevich Long cycles in expanding graphs, with applications
2:45-3:10	Liana Yepreman The local stability method and some applications
3:10-3:35	Kevin Hendrey The extremal function for Petersen minors
3:35-4:05	Coffee break
4:05-4:30	Ilkyoo Choi Improper coloring graphs on surfaces with girth conditions
4:30-5:10	Sang-il Oum Variants of Hadwiger's conjecture
6:30-	Dinner

Friday 17 th June	
9:00-9:40	Prasad Tetali Independent sets in regular graphs, spectral stability and generalizations
9:45-10:10	Nemanja Skoric Powers of cycles in random graphs and hyper graphs
10:10-10:40	Coffee break
10:40-11:20	Malwina Luczak Cutoff in the Bernoulli-Laplace diffusion model
11:25-12:05	Mihyun Kang Jigsaw percolation on random hypergraphs
12:10-12:35	Fiona Skerman Modularity of random graphs
12:35-1:35	Lunch
2:00-2:25	Lucas Hosseini Treeable graphings are local limits of finite graphs
2:25-2:50	Patrice Ossona de Mendez Clustering graphs in a local convergent sequence
2:50-3:20	Coffee break
3:20-4:20	Janos Pach Between probabilistic and extremal combinatorics: VC-dimension