QAMF workshop schedule

Friday, July 23rd @ Henn 201		
Morning - Session 1: Models of quantum computation - Adiabatic		
9:00 AM - 9:45 AM	Boris Altshuler (Columbia U)	Adiabatic quantum optimization and Anderson localization
9:45 AM - 10:15 AM	Vicky Choi (Virginia Tech)	Adiabatic Quantum Algorithms for the NP-Complete Maximum-Weight Independent Set, Exact Cover and 3SAT Problems
10:15 AM - 10:45 AM	COFFEE BREAK	
10:45 AM - 11:30 AM	Daniel Lidar (University of Southern California)	Combining dynamical decoupling with fault-tolerant quantum computation
11:30- 11:40 AM	QUICK BREAK	
11:40 AM – 12:25 PM	Steve Flammia (Perimeter)	Adiabatic Quantum Transistors
Afternoon - Session 2: Foundations of quantum mechanics		
2:00 PM – 2:45 PM	Rob Spekkens (Perimeter)	Why the quantum? Insights from classical theories with a statistical restriction
2:45 PM – 3:30 PM	Gemma De las Cuevas (Innsbruck)	Unifying Classical Spin Models Using A Quantum Formalism
3:30 PM – 4PM	COFFEE BREAK	
4:00 PM – 4:30 PM	Chris Ferrie (University of Waterloo)	On the relevance of quasi-probability representations to quantum foundations and quantum information theory
4:30 PM – 4:40 PM	QUICK BREAK	
4:40 PM – 5:10 PM	Osama Moussa (University of Waterloo)	Testing Contextuality on Quantum Ensembles with One Clean Qubit
Workshop Dinner		
7:30pm	Workshop Dinner @ Seasons in The Park Restaurant Meeting at 6:00pm in front of Henn 201	

Saturday July 24 @ Henn 201

Morning – Session 3: Quantum Algorithms (+ hardness of their classical simulation)

9:00 AM - 9:45 AM	David Poulin (Université de Sherbrooke)	Quantum Metropolis Sampling: An algorithm to simulate thermal systems with a quantum computer
9:45 AM – 10:30 AM	Maarten van den Nest (Max-Planck-Institut für Quantenoptik)	Simulating quantum computers with probabilistic methods
10:30 – 11:00 AM	COFFEE BREAK	
11:00 AM – 11:30 AM	Gorjan Alagic (University of Waterloo)	Quantum Algorithms from Topological Quantum Field Theories
11:30 AM – 11:40 AM	QUICK BREAK	
11:40 AM – 12:10 PM	Vincenzo Tamma (University of Maryland, Università degli Studi di Bari)	Factoring numbers with periodic interferograms

Afternoon – Session 4: Models of quantum computation – Measurement-based

2:00 PM – 2:45 PM	Dan Browne (University College London)	Correlations in Measurement-Based Quantum Computing and Bell Inequalities
2:45 PM – 3:15 PM	Ernesto Galvao (Univ. Federal Fluminense, Brazil)	Closed time-like curves in measurement-based quantum computation
3:15 PM – 4PM	COFFEE BREAK	
4:00 PM – 4:30 PM	Akimasa Miyake (Perimeter Institute)	Quantum computation on the edge of a symmetry-protected topological order

Early Evening – Session 5: Poster Session at the Abdul Ladha Science Student Centre

4:30pm – 5:00pm	BREAK, Poster Set Up
5:00pm – 6:30pm	Poster Session

Sunday July 25 @ IBLC 281

Morning – Session 6, Quantum error correction & Topological quantum computation

9:00 AM - 9:30 AM	Eduardo Mucciolo (University of Central Florida)	For How Long Is It Possible To Quantum Compute?
9:30 AM – 10:00 AM	Guillaume Duclos-Cianci (Université de Sherbrooke)	Fast Decoders for Topological Quantum Codes
10:00 AM – 10:30 AM	Héctor Bombín (Perimeter Institute)	Twists in topological codes
10:30- 11:00 AM	COFFEE BREAK	

Morning – Session 7, Algorithms II

11:00 AM – 11:45 AM	Pawel Wocjan (University of Central Florida)	Quantum Algorithm for Preparing Thermal Gibbs States
11:45 AM – 12:15 PM	Viv Kendon (University of Leeds)	Fractional scaling of quantum walks on percolation lattices
12:15 PM – 12:25 PM	QUICK BREAK	
12:25 PM – 12:55 PM	Michael Mullan (University of Colorado at Boulder)	A Numerical Quantum and Classical Adversary

Afternoon - Session 8, Lab tour at D-wave (workshop participants)

Afternoon	Bus pick up at 2pm outside of the UBC Bookstore. Tour will start at 3pm (3-5pm).