From Quantum Matter to Quantum Information, June 24 - 27, 2013

Room 202 MacLeod Building, 2356 Main Mall, Vancouver, BC

Registration, poster session and breaks will be in room 220 of MacLeod Building

Time	Monday, June 24	Time	Tuesday, June 25	Time	Wednesday, June 26	Time	Thursday, June 27
9:00 – 9:15	Introductory remarks by workshop organizers	9:00 – 10:00	Andrea Morello (University of New South Wales, Sydney, Australia): Single-atom spin qubits in silicon	9:00 - 10:00	Joerg Wrachtrup (MPI Stuttgart/ Stuttgart University, Germany): The quantum way of sensing	9:00 – 10:00	Alexandre Blais (Sherbrooke, Canada): Waveguides QED with an ensemble of qubits
9:20 - 10:20	Mike Thewalt (Simon Fraser University, Canada): What's so special about highly enriched 28Si?	10:00 – 10:30	Florian Dolde (MPI, Stuttgart, Germany): Room-temperature entanglement between single defect spins in diamond	10:00- 10:30	Andrew Golter (University of Oregon, USA): Applications of dark states in diamond NV centers	10:00 – 10:30	Martin Leib (TU Munich, Germany): Strongly interacting Many Body Physics with Circuit Quantum Electrodynamics Networks
10:20 - 10:50	Coffee break	10:30 - 11:00	Coffee Break	10:30 - 11:00	Coffee break	10:30 - 11:00-	Coffee break
10:50 – 11:50	Mohammad Amin (D-wave Inc, Canada): Decoherence induced deformation of the ground state in AQC	11:00 – 12:00	Jens Eisert (Freie University of Berlin, Germany): Dynamical quantum simulation with cold atoms	11:00 – 12:00	Vahid Sandoghdar (MPL Erlangen-Nuremberg, Germany): On the efficient interaction of single photons and single quantum emitters	11:00 – 12:00	Christian Gross (MPQ, Munich, Germany): Quantum Simulation of spin Hamiltonians
12:00 – 12:30	Rogerio de Sousa (University of Victoria, Canada): Temperature dependent spin-diffusion as a mechanism of flux noise and decoherence in SQUIDs and qubits	12:00 – 12:30	Hermann Kampermann (University of Dusseldorf, Germany): Quantum Correlations: much ado about nothing?	12:00 – 12:30	Gopalakrishnan Balasubramaniam (MPI Biophysical Chemistry, Goettingen, Germany): Harnessing the spin dynamics of NV for precision magnetic sensing	12:00 – 12:30	Pejman Jouzdani (University of Central Florida, USA): Fidelity of the surface code in the presence of a bosonic bath
12:30 – 13:00	David Herrera Marti (National University of Singapore, Singapore): Tradeoff between Leakage and Dephasing Errors in the Fluxonium Qubit	12:30 – 13:00	Michael Zwerger (University of Innsbruck, Austria): Universal and optimal error thresholds for measurement-based entanglement purification	12:30 – 13:00	Osama Moussa (IQC Waterloo, Canada): Double quantum coherence in NV-centers in diamond at small fields	12:30 – 13:00	Toby Jacobson (Sandia National Lab, USA): Distinguishing adiabaticity from relaxation in a silicon double quan-tum dot charge qubit
13:00 – 15:00	Catered lunch break	13:00 – 15:00	Catered lunch break	13:00 – 14:00	Catered lunch break	13:00 – 13:10	Concluding remarks by workshop organizers
15:00 - 16:00	Yu-Ao Chen (USTC Shanghai, China): Linear optical computation with multi-photon entanglement	15:00 – 16:00	Jay Gambetta (IBM Research, New York, USA): Progress in superconducting qubits	14:00 - 18:30	D-wave Lab tour Bus will depart at 14:00 from AMPEL building, 2355 East Mall		
16:00 – 16:30	Dan Browne (University College, London, UK): Quantum Computation with Classical States						
16:30 – 17:00	Coffee Break	16:00 - 17:00	Mark Johnson (D-wave Inc, Canada): Overview of a Quantum Annealling Processor				
17:00 – 19:00	Poster Session – Room 220	17:00 – 22:00	Walk in Stanley Park followed by a dinner at the Teahouse restaurant. Dinner will start at 19:00.				