INTRIQ Student Conference 2012 Schedule
January 11-13, Orford, QC

Wednesday, January 11

7:00  Arrival and dinner

Thursday, January 12

7:30 - 8:30  Breakfast

Quantum Dots I

8:30 - 8:40  Welcoming remarks

8:40 - 9:15  Chloé Bureau-Oxton (Sherbrooke) - Introduction To Spin Qubits In Lateral Quantum Dots

9:15 - 9:35  Patrick Harvey-Collard (Sherbrooke) - Fabrication of silicon quantum dots for quantum information

9:35 - 9:55  Gabriel Droulers (Sherbrooke) - Quantum Cellular Automata: From Concept To Fabrication

9:55- 10:15  Break

10:15 - 10:35  Xiaoya (Judy) Wang (McGill) - Theory Of Heavy-Hole Spin-Echo Decay

Topological Quantum Computing

10:35 - 10:55  Benjamin Schmidt (McGill) - Search for non-Abelian Anyons in the 5/2 fractional quantum hall state

10:55 - 11:15  Michel Savard (McGill) - Majorana Fermions In Semiconductor Heterostructures

11:15 - 11:35  Olivier Landon-Cardinal (Sherbrooke) - Practical Characterization Of Quantum Devices Without Tomography

11:35  Lunch (bag lunch available for skiers)
Friday, January 13

7:30 - 8:30  Breakfast

Quantum Information

8:30 - 9:05  Benno Salwey  (U de M) - Characterizing Entanglement

9:05 - 9:40  Ivan Savov (McGill) - Coding For Classical-Quantum Channels

9:40 - 9:55  Break

9:55 - 10:30  Artem Kaznatcheev  (McGill) - Quantum Query Complexity

10:30 - 10:50  Paul Raymond-Robichaud  (U de M) - Guildenstern and Rosencrantz In Quantumland

10:50 - 11:05  Break

Quantum Dots II

11:05 - 11:25  Julien Camirand-Lemyre (Sherbrooke) - Large Magnetic Field Generation For Ultra-Fast Single Spin Rotations

11:25 - 11:45  Sophie Rochette  (Sherbrooke) - Integration of micro-magnets to silicon double quantum dots for spin control

11:45 - 12:05  Benjamin D'Anjou (McGill) - Theory of Anomalous Magnetotransport In Triple Quantum Dots

12:05 - 1:30  Lunch

Circuit QED

1:30 - 2:05  Maxime Boisson (Sherbrooke) - Quantum Computing with Superconducting Circuits : an Introduction

2:05 - 2:25  Félix Beaudoin  (Sherbrooke) - Quantum Gates By Qubit Frequency Modulation In CircuitQed

2:25 - 2:45  Kevin Lalumière  (Sherbrooke) - Quantum Optics In A Transmission Line

2:45 - 3:05  Break
More Physical Implementations

3:05 - 3:25  Mohammed Harb (McGill) - GPU Acceleration and an Application to Quantum Transport

3:25 - 3:45  Guillaume Duclos-Cianci (Sherbrooke) - Topological Decoding Through Artificial Confinement

3:45 - 4:05  David Roy-Guay (Sherbrooke) - High Sensitivity Magnetometry With Diamond

4:05 - 4:25  Kevin Spahr (Sherbrooke) - How Fast Can We Modulate Noise?

4:25 - 4:45  Prizes and closing remarks