QIC 710, CS 768, CO 681, PH 767, AM 871 _Tentative_ **Schedule of Presentations**   **(Version: Dec. 18, 4:00pm)**

December 3 (Tuesday morning, 8:45am-10:30am) MC 2054 – _Note: during lecture time_
8:45-9:10am Stephan Harrigan   Nonlocal games and the "number on foreheads" model
9:15-9:40am Guldam Kwak   Dequantizing quantum machine learning

December 6 (Friday morning, 10:00am-12:15pm) QNC 1201
10:00-10:25 Alex Kerzner   Universal quantum computation using Clifford circuits and magic states
10:30-10:55 Isaac De Vlugt   Quantum state tomography
11:15-11:40 Sungeun Oh   Quantum information and the issue of information escaping from black holes
11:45-12:10 Thomas Schneider   Proving results about the complexity class PP using quantum computing

December 6 (Friday afternoon, 1:00pm-3:15pm) QNC 0101 – _Note: unusual start time & room_
1:00-1:25am Kimia Mohammadi   Quantum information and the issue of information escaping from black holes
1:30-1:55pm Ali Mahnoud   Quantum algorithm for solvable groups
2:15-2:40pm Noah Janzen   Blind quantum computation
2:45-3:10pm Étude O'Neel-Judy   Quantum algorithms for quantum field theories

December 10 (Tuesday morning, 10:00am-12:15pm) QNC 0101 – _Note: unusual room_
10:00-10:25 Michael Grabowecky   Manipulations of entanglement via local operations and classical communication
10:30-10:55 Yuming Zhao   NEEXP in MIP*
11:15-11:40 Dominic Fluet   Quantum information and the issue of information escaping from black holes
11:45-12:10 Ming Tong   Discrete-time quantum walk for rare event prediction

December 10 (Tuesday afternoon, 1:30pm-3:30pm) QNC 1201 – _Note: unusual start time_
1:30-1:55pm Dmitrii Marin   Quantum speedup of branch-and-bound algorithms
2:00-2:25pm Sandra Cheng   Quantum machine learning — what is it and is it useful?
2:30-2:55pm Kohdai Kuroiwa   Quantum capacity and super activation of quantum channels
3:00-3:25pm Luyao Wang   Application of concatenated coding during operations

December 12 (Thursday morning, 9:30am-11:45am) QNC 1201 – _Note: unusual start time_
9:30-9:55am Elijah Durso-Sabina   Efficiently constructing n-qubit gates with limited resources
10:00-10:25 Ejaaz Merali   Introduction to stabilizer codes and the 5-qubit code
10:45-11:10 Noah Greenberg   Fault-tolerant quantum computing
11:15-11:40 Hongyu Li   Quantum algorithms for solvable groups

December 12, (Thursday afternoon 2:00pm-3:30pm) QNC 1201
2:00-2:25pm Yi Hong Teoh   Fault tolerant quantum computing with stabilizer codes
2:30-2:55pm Sayan Gangopadhyay   Category theory for quantum mechanics
3:00-3:25pm Lanlan Yu   Quantum algorithm for solving linear systems

December 16 (Monday afternoon, 2:00pm-4:15pm) QNC 1201
2:00-2:25pm Fangzhou Yin   Introduction to two models of quantum random walk
2:30-2:55pm Yuqing Xie   Quantum-inspired classical algorithm for machine learning: strengths and limits
3:15-3:40pm Zewen Sun   Continuous-time quantum algorithms
3:45-4:10pm Zeou Hu   Using the quantum information framework to prove theorems

December 18 (Wednesday morning, 10:00am-1:15pm) QNC 1201– _Note: this session runs longer_
10:00-10:25 Turner Garrow   Quantum walks: introduction and applications
10:30-10:55 Yiju Zhao   Surface code: a stabilizer quantum error-correcting code on a 2-D lattice
11:00-11:25 Joanna Krynski   Realization of quantum computation through measurements on cluster states

December 19 (Thursday afternoon, 2:00pm-4:15pm) QNC 1201
2:00-2:25pm   Alex Currie   Quantum random walks: introduction and algorithm
2:30-2:55pm   Xiuzhe Luo   Quantum compilation: simplifying quantum circuits automatically
3:15-3:40pm   Mayar Mohamed   Computation implementation within the Adiabatic model
3:45-4:10pm   Yanming Qi   Complexity of finding the minimum eigenvalue of certain Hamiltonians

December 20 (Friday morning, 10:30am-Noon) QNC 1201
10:30-10:55   Sai Sreesh Venuturumilli   Error-correction using continuous variables
11:00-11:25   Twesh Upadhyaya   QKD security using CSS codes
11:30-11:55   Alexander Roman   Zero capacity quantum channels

December 20 (Friday afternoon, 2:00pm-4:15pm) QNC 1201
1:30-1:55pm Kosar Shirinzadeh Dastgiri Topological quantum computation and Error correction
2:00-2:25pm Annie Ray   Quantum computer architecture: approaching fault tolerant quantum computation
2:30-2:55pm Rubaya Absar   Quantum principal component analysis and its application (part 1)
3:15-3:40pm Aref Jafari   Quantum principal component analysis and its application (part 2)
3:45-4:10pm Kosar Shirinzadeh Dastgiri Quantum principal component analysis and its application (part 3)