

CQIQC-XI SCHEDULE | August 17 to 21, 2026

Main location: Fields Institute, Room 230

Monday	Tuesday	Wednesday	Thursday	Friday
A.M. CHAIR: Dvira Segal	A.M. CHAIR: Arun Paramekanti	A.M. CHAIR: Raymond Kapral	A.M. CHAIR: Nathan Wiebe	A.M. CHAIR: Peter Love
9a to 9:05a Welcome remarks	9:00a to 9:35a Edoardo Baldini <i>Coherent control and nonlinear coupling of terahertz collective modes in quantum materials</i>	9:00a to 9:35a Cyril Elouard <i>Quantum stochastic thermodynamics from coarse measurements</i>	9:00a to 9:35a Ryan O’Donnell <i>Quantum advantage for Subset-Sum</i>	9:00a to 9:35a Chen Wang <i>Autonomous quantum error correction for bosonic superconducting qubits</i>
9:10p to 9:45p Archana Kamal <i>Non-Markovian probes of many-body correlations</i>	9:40a to 10:05a Mingxuan Liu <i>Proper and improper mixed states serve as different prior beliefs for quantum state retrodiction</i>	9:40a to 10:05a Plato Deliyannis <i>Tavis-Cummings model: Controllability, multi-qubit gates, and an accidental symmetry</i>	9:40a to 10:05a Lily Wang <i>The color code, the surface code, and the transversal CNOT: NP-hardness of minimum-weight decoding</i>	9:40a to 10:05a Mohammad Ansari <i>Surface code hardware Hamiltonian</i>
9:50a to 10:15a Yashovardhan Ja <i>The Jaynes Cummings model as an autonomous Maxwell demon</i>	10:05a to 10:35a Coffee Break	10:05a to 10:35a Coffee Break	10:05a to 10:35a Coffee Break	10:05a to 10:35a Coffee Break
10:15a to 10:45a Coffee Break	10:35a to 11:10p Steven Rayan <i>Quantum computing in negative curvature</i>	10:35a to 11:10a Geraldine Haack <i>Quantum information processing in quantum thermal machines</i>	10:35a to 11:10a Michael Beverland <i>Fault-tolerant quantum computers: From surface codes to quantum LDPC architectures</i>	10:40a to 11:15a Kenneth Brown <i>Spin-boson models with trapped ions</i>
10:45a to 11:20a Dylan Mahler <i>Scaling photonic quantum computing with integrated GKP qubit sources</i>	11:15a to 11:40a Thi Ha Kyaw <i>Rate-independent defect plateau in quantum many-body systems</i>	11:15a to 11:40a Raam Uzdin <i>Orders of magnitude sampling overhead reduction in quantum error mitigation</i>	11:15a to 11:40a Matthew Pocrnic <i>Efficient simulation of pre-born-Oppenheimer dynamics on a quantum computer</i>	11:20a to 11:45a Denys Bondar <i>Alchemy as a quantum control problem: Theory and experiments</i>
11:25a to 11:50a Kaveh Delfanazari <i>Terahertz quantum communication with superconducting circuits</i>	11:45a to 12:00p Poster introductions	11:45a to 12:00p Poster introductions	11:45a to 12:00p Poster introductions	11:45p to 1:30p LUNCH
11:55p to 12:15p Poster introductions	12:00p to 2:00p LUNCH <i>Poster session</i> <i>1:30p to 1:50p Sponsor Workshop: Xanadu</i>	12:00p to 2:00p LUNCH	12:00p to 2:00p LUNCH <i>Poster session</i> <i>1:30p to 1:50p Sponsor Workshop: IQM</i>	P.M. CHAIR: Li Qian
12:15p to 2:15p LUNCH	P.M. CHAIR: Dvira Segal	P.M. CHAIRS: Paul Brumer & Boris Braverman	P.M. CHAIR: Aephraim Steinberg	1:30p to 2:05p Gil Refael <i>Title TBA</i>
P.M. CHAIR: Artur Izmaylov	2:00p to 2:35p Ivo Degiovanni <i>Weak interactions for estimating the complete CHSH parameter from each entangled photon pair</i>	2:00p to 3:30p BELL PRIZE SESSION (Earth Sciences Centre) Antoine Broeways <i>Assembling quantum matter one atom at a time</i> Mikhail Lukin <i>Title TBA</i> Mark Saffman <i>Quantum science with entangled atoms and Rydberg interactions</i>	2:00p to 2:35p Michael Manfra <i>Experimental discovery of anyonic braiding statistics</i>	2:10p to 2:35p Everett Patterson <i>Alice and Rob Revisited: How quantum reference frames can provide new insights into entanglement degradation</i>
2:15p to 2:50p Howard Wiseman <i>Turing, Wigner, Bell: the high frontier of experimental metaphysics</i>	2:40p to 3:05p Sponsor talk, IQM <i>Frank Deppe: Progress on superconducting quantum processors at IQM</i>		2:40p to 3:05p Madeleine Fisher <i>Microwave-to-optical conversion via Rydberg excitons in cuprous oxide</i>	2:35p to 3:05p Coffee Break
2:55p to 3:20p Meenu Kumari <i>Beyond trotterization: Variational product formulas for quantum simulation</i>	3:05p to 3:35p Coffee Break	3:30p to 4:00p Coffee Break	3:05p to 3:35p Coffee Break	3:05p to 3:40p Shizeng Lin <i>Controlling quantum materials with light-driven phonons</i>
3:20p to 3:50p Coffee Break	3:35p to 4:00p Clive Cenxin Aw <i>Quantum prior hacking & Schrodinger bridges</i>	4:00p to 5:00p BELL PRIZE SESSION Continued	3:35p to 4:00p Sponsor talk, IonQ <i>Aharon Brodutch: Fault-tolerant quantum computing with trapped ions: The walking cat architecture</i>	3:45p to 4:10p Anastasiia Mashko <i>Single-shot magnetic-field sensing and gradiometry with spin arrays</i>
3:50p to 4:25p Nicolas Treps <i>Generating, witnessing and certifying non-Gaussian states of time-frequency modes</i>	4:05p to 4:30p Aharon Brodutch <i>Advantage in distributed quantum computing with slow interconnects, and experiments on a monolithic QPU</i>	6p to 9p Conference Reception & Dinner (Trintity College)	4:05p to 4:30p Shayan Majidy <i>Entangling logical qubits without physical operations</i>	4:15p to 4:45p Open discussion and closing remarks
4:30p to 4:55p Felix Motzoi <i>Ultrafast gates through multi-photon transition removal</i>	4:35p to 4:45p Sponsor remarks, RBC		4:35p to 5:00p Aaron Goldberg <i>Preasymptotic quantum metrology</i>	
	5p to 7p Evening Poster Session (Bahen Centre)			