

	Time	Session	Speaker	Group	Title
Tuesday 16 December	9:15-9:45	Continental Breakfast			
	9:45-10:00	Scientific Director	Richard Hughes		
	10:00-10:50	2 Minute Summaries	Everybody		
	10:50-11:15	Break			
	11:15-12:15	Quantum Research with Photons	Richard Hughes	P-21	Quantum key distribution
			Mark Ettinger	N-3	Bayesian analysis of the security of quantum key distribution
			Beth Nordholt	P-21	Fun with downconversion
			Peter Milonni	T-DO	Photon statistics of parametric downconversion
	12:15-13:30	Lunch (E130)			
	13:30-14:45	Quantum Research with Cold Atoms	Dana Berkeland	P-21	Experiments with trapped ions
Calum MacCormick			P-21	Experiments with Bose condensates	
Roberto Onofrio			T-DO	Fermion superfluidity in bichromatic optical traps	
Xinxin Zhao			C-INC	Quantum degeneracy and quantum entanglement of ultracold neutral atoms.	
Jinwei Wu			C-INC	Manipulating atoms in an far-off-resonance CO ₂ dipole trap	
14:45-15:15	Break				
15:15-17:00	Theory	Howard Barnum	CCS-3	Bounds and algorithms for quantum query computation: implications for physics simulation on quantum computers	
		Juan Pablo Paz	T-DO	Phase space methods for quantum computation	
		Alexander Balatsky	T-11	Single spin detection and quantum noise spectroscopy	
		Daniel James	T-4	Characterizing quantum states and quantum processes	
		Eddy Timmermans	T-4	TBA	
		Fernando Cucchietti	T-DO/QC	Decoherence and the Loschmidt echo in classically chaotic systems	
		Salman Habib	T-8	TBA	
Wednesday 17 December	9:00-10:00	Computation & Materials	Maya Gokhale	NIS	Scalable reconfigurable computing
			Gennady Berman	T-DO/QC	Theory of scalable spin-based quantum computation and qubit measurement
			Geoff Brown	MST-8	Scanning tunneling microscopy examination of vacancy defects and phosphorus atoms on Si(100)-2x1
			Victor Klimov	C-PCS	Tailoring nanocrystal quantum dots for quantum information applications
	10:00-10:30	Break			
10:30-11:15	Computation & Materials	Shawn McGrane	DX-2	Quantum computing with molecular vibronic qubits using ultrafast laser techniques	
		Dima Mozysky	T-11	Physical models of quantum-limited measurement of nanomechanical systems	
11:15-12:00	Round Table Discussion	Toni Taylor	MST-10	Ultrafast coherent manipulation of quantum systems	
		Toni Taylor (Discussion Leader)			
12:00-13:00	Lunch (E130)				