

JQUEST: JYU Quantum Electronics, Superconductivity, and Topology workshop

	Time	Speaker	Title
Wednesday, 4 th December	08:30	-	Registration
	08:50	-	Opening words
Superconductivity session			
	09:00	Tero Heikkilä	Superconducting quantum materials and devices
	10:00	-	Coffee break
	10:30	Pertti Hakonen	Extraordinary superconducting materials: studies of Al/InAs nanowires, CoSi ₂ , and PdTex
	11:15	Elia Strambini	Helical superconductivity in Al/NiBr ₂ thin films
	12:00	-	Lunch break
	13:30	Pieter de Visser	Energy-resolved detection of single photons with superconducting microwave resonators
	14:15	Rubén Seoane	Majorana states in artificial Kitaev chains
	15:00	Stefan Ilić	Non-reciprocal phenomena in superconducting structures with spin-orbit coupling
	15:45	-	Poster session
	18:00	-	Dinner
Topology session			
Thursday, 5 th December	09:15	Peter Liljeroth	Quantum materials with van der Waals heterostructures
	10:00	-	Coffee break
	10:30	Jose Lado	Hamiltonian learning, triptons, and high-order topological order in engineered nanoscale quantum magnets
Quantum information/computing session			
	11:15	Shaukat Ali	The convergence of quantum computing, software testing, and artificial intelligence
	12:00	-	Lunch break
	13:30	Manohar Kumar	Half quantized Hall plateaus in the confined geometry of graphene
	14:15	Alexandru Paler	What algorithms should we study with 100 qubits and 1m logical gates?
	15:00	-	Coffee break
	15:30	Carles Roch i Carceller	Quantum correlations and randomness certification with energy-level constraints
	16:15	Henri Lyyra	Generalized data processing inequalities for quantum information protocols
	17:00	-	Closing words