Condensed Matter and Quantum Materials 2024

Programme

Friday 5 July 2024

Time	Room	Programme
9:00 am to 10:00 am	Theatre A	**Plenary Speaker: Andrew P Mackenzie** Using uniaxial pressure to both tune and probe quantum materials
10.00 am to 10:30 am	Physics and Astronomy Building and Medical Sciences Building	**Morning Break**
10:30 am to 12:30 pm	Theatre A	**Ultrafast/2D** **10:30 am - 11:05 am Charlotte Sanders:** Time-Resolved Photoelectron Diffraction: Mapping Atomic Motion in Phonon Oscillations **11:05 am - 11:25 am Roosmarijn de Wit:** Simulating 2D electronic spectroscopy with tensor networks **11:25 am - 11:45 pm Deepnarayan Biswas:** Soft X-ray k-resolved photoelectron spectroscopy with a momentum microscope at Diamond Light Source **11:45 am - 12:05 pm Sebastian Buchberger:** Investigating the influence of screening on the unconventional charge density wave in monolayer TiSe2 **12:05 pm - 12:40 pm Angela Wittmann:** Chiral-induced Unidirectional Spin-to-charge conversion
	Theatre B	**Thin Films** **10:30 am - 10:50 am Bruno Kenichi Saika:** Electronic structure of Cr-intercalated NbSe2 epitaxial thin films studied by angle-resolved photoemission spectroscopy **10:50 am - 11:10 am Akhil Rajan:** Epitaxial growth of large-area monolayers and van der Waals heterostructures of transition-metal chalcogenides **11:10 am - 11:30 pm Naina Kumari:** Synthesis, Electronic and Magnetic Investigation of Polymorphic 2D CrxTey Monolayers **11:30 am - 11:50 am Tugrul Ersoz:** Metal 3D Printing of Nb-47Ti Superconductor Components **11:50 am - 12:25 pm Christopher Bell:** Physics and Materials Science of Heavy Element Thin Films
	Theatre C	**Magnetism 3** **10:30 am -11:05 am Libor Smejkal:** Altermagnetism: from spintronics to unconventional magnetic phases **11:05 am - 11:25 am Malcolm Connolly:** Nanomagnet-induced Synthetic Spin-Orbit Coupling in a Superconductor-Semiconductor Nanowire **11:25 am - 11:45 pm Dirk Backes:** Magnon-Magnon Coupling in a Pinned Synthetic Antiferromagnet **11:45 am - 12:05 pm Adam McRoberts:** From matrix product states to field theory in the J1-J2 spin chain **12:05 pm - 12:25 pm Adil Gangat:** Numerical evidence for weak and "half-weak" first-order phase transitions in the frustrated classical J1-J2 square lattice Ising model
12:30 pm to 1:30 pm	Physics and Astronomy Building	**Lunch (grab and go)**