Programme: Thursday 26 June 2025

9:00 AM - 10:00 AM	**Plenary Speaker: Susan Speller**, University of Oxford, UK (Room: B.H05. Sponsored by Kiutra) Radiation damage of high temperature superconductors for fusion magnets
10:00 AM - 10:30 AM	**Morning Break 3**
10:30 AM - 12:50 PM	**Unconventional Superconductivity** (Room: B.H05. Sponsored by Kiutra) **10:30 AM - 11:00 AM Lucia Iglesias Bernardo (Invited Speaker)**: Democratizing nickelates superconductors: Topotactic reduction induced by aluminum sputter deposition **11:00 AM - 11:20 AM LV Levitin**: Identification of topological superconductivity in antiferromagnetic heavy-fermion metal YbRh2Si2 **11:20 AM - 11:40 AM Simon Bending**: Magnetically-controlled Vortex Dynamics in a Ferromagnetic Superconductor **11:40 AM - 12:00 PM Andreas Kreisel**: Quasiparticle Interference of Spin-Triplet Superconductors: Application to UTe2 **12:00 PM - 12:20 PM Joseph Carroll**: Imaging Odd-Parity Quasiparticle Interference in the Superconductive Surface State of UTe2 **12:20 PM - 12:50 PM Brian Møller Andersen (Invited Speaker)**: Theory of superconducting pairing and topological surface states in UTe2
	Non-equilibrium (Room: LT2) **10:30 AM - 11:00 AM Katarzyna Macieszczak (Invited Speaker)**: Gauge freedoms in unravelled quantum dynamics: How do different continuous measurements yield identical quantum trajectories and what does it mean for their symmetries? **11:00 AM - 11:20 AM David Strachan**: Non-Markovian Quantum Mpemba Effect **11:20 AM - 11:40 AM Enrico Da Como**: Coherent phonon dynamics in two-dimensional charge density wave materials **11:40 AM - 12:00 PM Alvaro Lanza**: Estimating Entropy from Coarse-grained Single-molecule Statistics in Langevin Systems **12:00 PM - 12:20 PM Alessandro Romito**: Theory of free fermions dynamics under partial post-selected monitoring **12:20 PM - 12:50 PM Halim Kusumaatmaja (Invited Speaker)**: Harnessing Complex Interfacial Flow Dynamics for Structuring Soft Materials

	Facilities for CMQM (10:30am to 12:30pm) (Room: G.H01) **10:30 AM - 11:00 AM David LeBeouf (Invited Speaker):** Advancements in magnet technologies for condensed matter physics at EMFL **11:00 AM - 11:30 AM Matthew Watson (Invited Speaker):** Excelling in Photoemission Spectroscopy at Diamond Light Source **11:30 AM - 12:00 PM Sanghamitra Mukhopadhyay (Invited Speaker): Condensed** Matter and Quantum Materials Research at ISIS Neutron and Muon Source **12:00 PM - 12:30 PM Amalia Patane (Invited Speaker):** Magnificent Magnetic Fields
12:30 PM - 1:00 PM	**Lunch Discussion: Future Directions of Facilities** (Room: G.H04)
12:50 PM - 2:15 PM	**Lunch 3**
2:15 PM - 4:05 PM	**Strongly Correlated Electron Systems** (Room: B.H05. Sponsored by Kiutra) **2:15 PM - 2:45 PM Zlatko Papic (Invited Speaker):** Fingerprints of composite fermion Lambda levels in scanning tunneling microscopy **2:45 PM - 3:05 PM Peter Wahl:** Emergent exchange-driven giant magnetoelastic coupling in a correlated itinerant ferromagnet **3:05 PM - 3:25 PM Jacopo Radaelli:** Critical spin fluctuations and strange metal behaviour in La2-xSrxCuO4 **3:25 PM - 3:45 PM Mengke Ha:** Time-Reversal Symmetry Protected Transport at Correlated Oxide Interfaces **3:45 PM - 4:05 PM Graham Van Goffrier:** Quantum Spectral Sampling for Quantum Link Models
	Unconventional Superconductivity II (Room: LT2) **2:15 PM - 2:45 PM Malte Grosche (Invited Speaker):** Field-resilient superconductivity in $CeSb_2$ and UTe_2 **2:45 PM - 3:05 PM Roemer Hinlopen:** Resolving the Fermi surface and detection of anisotropic vortex pinning in FeSe **3:05 PM - 3:25 PM Amalia Coldea:** Strain-tuning of electronic structure of a tetragonal iron-chalcogenide superconductor **3:25 PM - 3:45 PM Greg Mazur:** Achieving topological superconductivity with artificial Kitaev chains **3:45 PM - 4:05 PM Kourosh Shirkoohi:** ARPES-derived anomalous spectral weight across the Fermi surface of the strange metal phase

	2D and 1D Materials (Room: G.H01) **2:15 PM - 2:45 PM Michele Pizzochero (Invited Speaker):** Unconventional π-electron magnetism in graphene nanoribbons **2:45 PM - 3:05 PM Lewis Burke:** Momentum–dark excitons & trions in systems exhibiting a Mexican-hat energy dispersion: example of InSe **3:05 PM - 3:25 PM Mugerabe Zerabza:** The folded pseudochiral Fermi surface of charge density wave material 4Hb-TaSe2 **3:25 PM - 3:45 PM Jeongmin Lee:** Physical properties of layered metal-rich chalcogenides Ta2Se and its application **3:45 PM - 4:05 PM Jan Tomczak:** Universal transport at Lifshitz metal-insulator transitions in two dimensions
4:05 PM - 4:30 PM	**Afternoon Break 3** **Ice-cream provided and sponsored by M4QN**
4:30 PM - 5:30 PM	**Plenary Speaker: Chris Howard**, University College London, UK (Room: B.H05. Sponsored by Kiutra) Studying low-dimensional materials, from fundamental research to real world impact
7:00 PM - 10:30 PM	**Conference Dinner** Sponsored by Oxford Instruments NanoScience Great Hall, Wills Memorial Building, Queens Road, Bristol, BS8 1RJ