Programme: Tuesday 24 June 2025

8:00 AM - 8:45 AM	**Registration and Arrival Refreshments**
8:45 AM - 9:00 AM	**Welcome by Sven Friedemann**, University of Bristol, UK (Room: G.H05. Sponsored by Kiutra)
9:00 AM - 10:00 AM	**Plenary Speaker: Christopher Marrows**, University of Leeds, UK (Room: G.H05. Sponsored by Kiutra) Skyrmions in chiral magnetic multilayers
10:00 AM - 10:30 AM	**Morning Break**
10:30 AM - 12:50 PM	**Superconductivity I (IOP SC Group)** (Room: G.H05. Sponsored by Kiutra) **10:30 AM - 11:00 AM Sun-Woo Kim (Invited Speaker):** Predictive Modeling of Superconductors: From High-Pressure Hydrides to Nickelates **11:00 AM - 11:20 AM Harry Morgan:** Understanding quantum materials through chemical bonding models **11:20 AM - 11:40 PM Andreas Rost:** Superconducting phases of CeRh2As2 in clean microcrystals **11:40 AM - 12:00 PM Thomas Sheerin:** Higher-harmonic superconductivity driven by van Hove singularities in the third-nearest-neighbour square-lattice Hubbard model **12:00 PM - 12:05 PM Andreas Rost:** IOP Superconductivity Thesis Prize Introduction **12:20 PM - 12:50 PM Sam Cross (IOP Superconductivity Thesis Prize Talk):** High-temperature superconductivity in thin-film metal hydrides at megabar pressures
	Magnetism (Room: LT2) **10:30 AM - 11:00 AM Peter Wadley (Invited Speaker):** Altermagnetism imaged and controlled down to the nanoscale **11:00 AM - 11:20 AM Habib Rostami:** Collective Excitations in Altermagnets: A Fermi Liquid Approach **11:20 AM - 11:40 AM Clifford Hicks:** Triangular antiferromagnetism under uniaxial stress: a study of PdCrO2 **11:40 AM - 12:00 PM George Wood:** A Magnon Band Analysis of GdRu2Si2 in the Field-Polarised State **12:00 PM - 12:20 PM Leonie Woodland:** From continuum excitations to sharp magnons via transverse magnetic field in the spin-1/2 Ising-like triangular lattice antiferromagnet Na2BaCo(PO4)2 **12:20 PM - 12:50 PM Andreas Kreisel (Invited Speaker):** Minimal Models for Altermagnetism: Mechanisms and experimental consequences

	Nanoscale and 2D (Room: G.H01) **10:30 AM - 11:00 AM Graham Baker (Invited Speaker):** Size-restricted magneto-transport in $PdCoO_2$ **11:00 AM - 11:20 AM Joshua Coop:** Manipulating quantum states in multi-gated 1D systems **11:20 AM - 11:40 AM Vivek Kumar:** Investigation of correlation effects mediated by impurity in a one-dimensional quantum wire via dc source-drain bias spectroscopy **11:40 AM - 12:00 PM Yingshi Duo:** Quantised conductance in one-dimensional quantum wires **12:00 PM - 12:20 PM Elisabeth Bancroft:** On-surface bottom-up growth of graphene nanoribbons on SiO2 **12:20 PM - 12:50 PM Henry Legg (Invited Speaker):** Can we build a topological qubit in 2025?
12:50 PM - 2:15 PM	**Lunch**
2:15 PM - 4:05 PM	**Spin-Orbit** (Room: G.H05. Sponsored by Kiutra) **2:15 PM - 2:45 PM Aleksandra Krajewska (Invited Speaker):** Spin-orbital phases in 4d pyrochlore oxides **2:45 PM - 3:05 PM Daniel Prestwood:** Spintronic Kapitza pendulum: dynamical stability by spin transfer **3:05 PM - 3:25 PM Thomas Saunderson:** Orbital Rashba induced triplet superconductivity in elemental superconductors **3:25 PM - 3:45 PM Thomas Robinson:** A Low Energy uSR study of proximity superconductivity in a high spin orbit coupling semiconductor 2DEG **3:45 PM - 4:05 PM Charlie Freeman:** Tunable Ultra-Strong Magnon-Magnon Coupling Approaching the Deep-Strong Regime in a van der Waals Antiferromagnet
	2D Materials and Toplogical Devices (Room: LT2) **2:15 PM - 2:45** PM **Roman Gorbachev (Invited Speaker):** Ultraclean van der Waals Heterostructures **2:45 PM - 3:05 PM Benjamin Dewes:** Scalable two-dimensional semiconductors: From photo-gating to deep UV optoelectronics **3:05 PM - 3:25 PM Joshua Thompson:** Enhancing optoelectronic devices with exciton topology **3:25 PM - 3:45 PM Amalia Patane:** Fast Ultraviolet-C Photonics: Sensing Laser Pulses on Femtosecond Timescales **3:45 PM - 4:05 PM Soumya Sarkar:** Ultraclean contacts for two-dimensional spintronic and ferroelectric memory devices

	Strongly Correlated (Room: G.H01) **2:15 PM - 2:45 PM Igor Markovic (Invited Speaker):** Electronic response to a current-induced insulator-to-metal transition in Ca2Ru04 **2:45 PM - 3:05 PM Alexandre Chaduteau:** Momentum-space modulated symmetries in the Chiral Luttinger liquid **3:05 PM - 3:25 PM Seohyun Kong:** Extracting Topological Information from the Interface Green's Function **3:25 PM - 3:45 PM Mingee Chung:** Magnetised Haldane Chain **3:45 PM - 4:05 PM Chris Bell:** Physics and materials science of elemental uranium thin films and alloys
4:05 PM - 4:30 PM	**Afternoon Break**
4:30 PM - 5:30 PM	**Plenary Speaker: Lilia Boeri**, Sapienza Università di Roma, Italy (Room: G.H05. Sponsored by Kiutra) Pressure-quenching as a practical strategy to design new high-Tc conventional superconductors
5:30 PM - 7:30 PM	**Poster Session, Exhibition, Drinks Reception and Buffet**