

## Condensed Matter and Quantum Materials 2024

### Poster Presentations

Poster No.	First Name	Last Name	Affiliation	Title	Poster Board Building Location
1	Siri A.	Berge		Competing charge density waves and magnetism in DyTe <sub>3</sub>	Medical Sciences Building
2	Lewis	Burke	Loughborough University	Momentum-dark excitons & trions in InSe with Mexican hat energy dispersion	Medical Sciences Building
3	Chaia	Carroll	University College Cork	Discovery of Dynamical Heterogeneity in a Supercooled Magnetic Monopole Fluid	Medical Sciences Building
4	Tobias	Chatfield	Bristol University	Magnetic Penetration Depth Measurements of Optimally Doped Yttrium Barium Copper Oxide Crystals Under Hydrostatic Pressure	Medical Sciences Building
5	Yuxuan	Deng	Hkust	Valley-polarized Josephson Junctions as gate-tunable $\pi$ qubit platforms	Medical Sciences Building
6	Shey	Dylan Lovett	Imperial College London	Optimising nanomagnet arrays for realising topological phases in superconductor-semiconductor quantum devices	Medical Sciences Building
7	Aspen	Fenzl	University of Sheffield	Directional Superradiance in Chiral Waveguide-Coupled Quantum Dot	Medical Sciences Building
8	Sven	Friedemann	University of Bristol	Magnetic, Transport, and Structural Studies of High-Pressure superconductor La <sub>3</sub> Ni <sub>2</sub> O <sub>7</sub>	Medical Sciences Building
9	Akshaya	G	University of St Andrews	Towards room-temperature polaritons in a tunable open microcavity using 2D hybrid perovskites	Medical Sciences Building
10	Luke	Hallacy	University of Sheffield	Non-Linear Quantum Optics at a Topological interface	Medical Sciences Building
11	Dominic	Hallett	University of Sheffield	Co-operative and super-radiant emission from electrically-tuneable waveguide-coupled quantum dots	Medical Sciences Building
12	Rafal	Idczak	University Of Wroclaw	Comparison of superconducting properties of three HEAs with the same valence electron concentration	Medical Sciences Building
13	Guratinder	Kaur	The University of Edinburgh	Phonon study in Spin-Jahn Teller antiferromagnet: CoTi <sub>2</sub> O <sub>5</sub>	Medical Sciences Building
14	Seohyun	Kong	University of St Andrews	Extracting Topological Information from Interface Green's Function	Physics and Astronomy Building
15	Zhongchangfei	LI	Hong Kong University of Science and Technology	Flat Band Josephson Junctions with Quantum Metric	Physics and Astronomy Building
16	Xinglei	MA	Hong Kong University of Science and Technology	Quantum Metric induced Ultra-long Crossed Andreev Reflection in Multi-orbital Kitaev Chain	Physics and Astronomy Building
17	Uladzislau	Mikhailau	University of St Andrews	Probing electronic properties of quasi-2D metamagnetic materials using Scanning Tunnelling Spectroscopy technique	Physics and Astronomy Building
18	Jack	Murphy	University College Cork	Spiral Spin Liquid Noise	Physics and Astronomy Building
19	Wojciech	Nowak	University of Wroclaw	Superconductivity in UNbTiVZr, a new high entropy alloy containing uranium	Physics and Astronomy Building
20	Arkadeb	Pal	University of Groningen	Spin-induced strongly correlated magnetodielectricity, magnetostriction effect and spin-phonon coupling in helical magnet Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>3</sub>	Physics and Astronomy Building
21	Bartosz	Rusin	University of Wroclaw	Local distortions of the crystal structure in a new High-Entropy Alloys Ti <sub>0.5</sub> (ZrNbTaHf) <sub>0.5</sub> and Ti <sub>0.5</sub> (VNBaTaHf) <sub>0.5</sub> : DFT study	Physics and Astronomy Building
22	Jisvin	Sam	IISER Tirupati	Superconductivity in Ca intercalated bilayer silicene	Physics and Astronomy Building
23	Anna	Toth	University of Edinburgh	Catalogue of Non-Fermi Liquid Exchange Models for Doublet Impurities in a Cubic Field	Physics and Astronomy Building
24	Vittoria	Urso	Unimore	Theoretical insight into terahertz spectroscopy of the dye atacamite	Physics and Astronomy Building
25	John	Wilkinson	Isis Neutron And Muon Source	Applying the Bethe-Salpeter equation to muon spin rotation experiments: Opportunities and Challenges	Physics and Astronomy Building