

Poster Programme

1. Optimisation of perpendicular magnetic tunnel junction structures using scanning transmission electron microscopy
Meg Smith, University of Manchester, UK
2. Magnetoelectric Coupling of Terbium Tantalate
Xiaotian Zhang, University of Cambridge, UK
3. Soft X-ray Measurement of Suspended 3D Artificial Spin-ice Structures
Edward Harding, Cardiff University, UK
4. Study of magnetic properties in Dy₅Sn₃
Suman Mondal, Indian Association for the Cultivation of Science, India
5. Current-Driven Domain Wall Motion in a Synthetic Antiferromagnet Multilayer
Christopher Barker, University of Leeds, UK
6. Revealing the nature of magnetic interaction in ground state of Cr doped Sb₂Te₃ by muon spin relaxation experiments.
Tamal Kumar Dalui, Indian Association for the cultivation of science, India
7. Induced magnetism on monolayer NbSe₂
Fabrizio Cossu, Kangwon National University, Republic of Korea
8. Persistent half-metallic ferromagnetism in (111)-oriented manganite superlattices
Fabrizio Cossu, Kangwon National University, Republic of Korea
9. Resonant scattering of surface acoustic waves by magnetic stripe arrays
Yatyin AU, University of Exeter, UK
10. Precise transport of skyrmions by surface acoustic waves
Jintao Shuai, University of Leeds, UK
11. Can TEM see the magnons? Inelastic spin-scattering of confined magnons in magnetic interfaces by electrons
Julio Do Nascimento, University of York, UK
12. Theoretical dispersion of confined magnons in 3D heterostructures
Julio Do Nascimento, University of York, UK
13. Towards spin-orbit torques in large-scale WS₂/ferromagnet heterostructures
Henry De Libero, University of Manchester, UK
14. Controlling heavy element crystal structures for superspintronics
Chris Bell, University of Bristol, UK
15. Phase field modelling of magnetoelasticity in antiferromagnets
Robert Mackay, University of Leeds, UK
16. Spin orbit torque driven magnetization reversal in CoFeTaB/Pt probed by resonant x-ray reflectivity
David Burn, Diamond Light Source, UK
17. Current-induced resonance in long conductive ferromagnetic nano-wires
Mohammad Alneari, Exeter, UK
18. Electromagnetic wave induced resonance in ferromagnetic nano-wires and metamaterials
Mustafa Aziz, University of Exeter, UK

19. Non-volatile leaky integrate-and-fire neurons with domain walls in antiferromagnetic insulators
Verena Brehm, NTNU Trondheim, Norway
20. Longitudinal spin fluctuations in atomistic spin models
David Papp, University of York, UK
21. Long-range anomalous resistance behaviour in superconductor-topological insulator heterostructures due to current redistribution effects
Abhirami Saminathan, Indira Gandhi Centre for Atomic Research, India
22. Magnetic Material Discovery using digital and high-throughput methodologies
Nicola Morley, University of Sheffield, UK
23. Sputter deposition for thin films of the kagome ferromagnet Fe₃Sn₂
Callum Brennan-Rich, University of Leeds, UK
24. Detection of Skyrmion Nucleation in Synthetic Antiferromagnet by Scanning Transmission X-ray Microscopy
Razan Aboljadayel, University of Leeds, UK
25. Study of the Quantum Spin Hall Effect in InAs/GaSb Coupled Quantum Wells
Megan Kelly, University of Leeds, UK
26. Nailed it: Reservoir computing with a rusty iron nail
Charles Swindells, University of Sheffield, UK
27. Efficient Interfacing with Magnetic Metamaterials for Reservoir Computing
Charles Swindells, University of Sheffield, UK
28. Stacking order-dependent domain wall depinning in trilayer structures
Xingtai Chen, Royal Holloway University of London, UK
29. Combining two-photon lithography with laser ablation of sacrificial layers: A route to isolated 3D magnetic nanostructures.
Arjen van den Berg, Cardiff University, UK
30. The impact of non-uniform rare-earth concentration on the magnetic behaviour of GdCoFe ferrimagnetic alloys for spintronic applications
Debi Rianto, Durham University, UK
31. Chemically controllable magnetic transition temperature and magneto-caloric properties in MnZnSb based compounds
Jonathan Alaria, University of Liverpool, UK
32. Synthesis, crystal structure and magnetic studies of copper (II) complexes with diazine based ligand
Abhishikta Chatterjee, Sidho-Kanho-Birsha University, India
33. Exploring magnetic heterostructures with reflectivity ferromagnetic resonance
Jack Bollard, University of Oxford, UK
34. Effects of Dzyaloshinskii-Moriya interactions and dipole-dipole interactions on spin waves in finite-sized ferromagnetic chains and stripes
Bushra Hussain, University of Michigan-Dearborn, USA
35. Zeeman ladder magnons and spin-phonon coupling in some quasi-one-dimensional hexagonal antiferromagnets
Michael Cottam, University of Western Ontario, Canada
36. Encoding and multiplexing information signals in magnetic multilayers with fractional skyrmion tubes
Will Griggs, University of Manchester, UK

37. Voltage-Controlled Skyrmionic Interconnect with Multiple Magnetic Information Carriers
Will Griggs, University of Manchester, UK
38. Correcting the Ab Initio Magnetocrystalline Anisotropy Energy
Scott Donaldson, University of York, UK
39. Nonlinear spin dynamics of ErFeO₃ induced by intense THz pulses
Ruben Leenders, Lancaster University, UK
40. A new, exact perturbation theory applied to the cubic lattice Ising model
Joseph Jones, University of Birmingham, UK
41. Terahertz spin dynamics across Jahn-Teller-like magnetic phase transition
Oleksandr Kovalenko, Lancaster University, UK
42. Optimisation of Exchange Bias for Automotive Sensors
Alex Carter, University of York, UK
43. Non-equilibrium superconductivity at a superconductor/metallic ferromagnet interface probed by THz time-domain spectroscopy
Guillermo Nava Antonio, University of Cambridge, UK
44. THz emission spectroscopy for optical control of exchange bias
Yuichi Saito, Lancaster University, UK
45. Ferrimagnetic [Co_{1-x}Tbx/Pt]_n multilayers with bulk perpendicular magnetic anisotropy for spintronic applications
Emily Heppell, University of Oxford, UK
46. Agent-Based Modelling of Magnetic Metamaterials
Ian Vidamour, University of Sheffield, UK
47. Switching dynamics of in-plane magnetized spin-orbit torque devices
Paul Keatley, University of Exeter, UK
48. The Exeter Time-Resolved Magnetism (EXTREMAG) Facility
Paul Keatley, University of Exeter, UK
49. Tuning the deposition conditions of MnN based exchange biased systems
Fatimah Alsaud, University of York, UK
50. Simulations of Magnetisation Reversal in FM/AFM Bilayers with THz Frequency Field Pulses
Joel Hirst, Sheffield Hallam University, UK
51. BEOL Compatible PtMn for AF-Spintronics
William Frost, University of York, UK
52. Crystallisation of PtMn Alloys for BEOL Processes
William Frost, University of York, UK
53. Probing the Magnetization Distribution in Ferrite Nanoparticles with Magnetic SANS
Dirk Honecker, Science and Technology Facility Council, UK
54. A modular optically pumped magnetometry system for magnetoencephalography
Thomas Coussens, University of Sussex, UK
55. Magnetic super-structure in TbCu₂
Diego Alba Venero, Isis Neutron And Muon Source, UK

56. POLREF: Time of flight Polarised Reflectometer for Magnetism in Thin Films
Christy Kinane, ISIS, RAL, STFC, UK
57. Monitoring Ionic Diffusion from CoB in Molecular layers
Daniel Roe, University of Leeds, UK
58. Magnetically doped Nanocrystalline Topological Insulators for the Observation of Emergent Quantum Phenomena
Joshua Bibby, University of Oxford, UK
59. Material dependent exchange stiffness for micromagnetic and multiscale models
Jack Collings, University of York, UK
60. The neutron beamlines for nanomagnetism at the Institut Laue-Langevin
Nina-juliane Steinke, Institut Laue-Langevin, France
61. Study on phase stability, martensitic transformation and magnetic properties of Ni₅₀Mn_{37.5-x}Ti_{12.5}Fe_x (x = 3.125, 6.25, 9.375) all-d-metal Heusler alloys
Jing Bai, University of Sheffield, UK
62. Surface Acoustic Wave Induced Vortex Oscillations
Emma Gilroy, University of Sheffield, UK
63. DC resistance measurements in multi-layer additively manufactured Yttrium Barium Copper Oxide components
Arthur Coveney, Loughborough University, UK
64. Physical Reservoir Computing with Voltage-Controlled Superparamagnetic Devices
Zhengfei Chen, University of Sheffield, UK
65. Localised nano-conversion of magnetic nanostructures with thermal scanning probe lithography
Oliver Barker, University of Liverpool, UK
66. The Search for Emergent Excitations in a Structurally Incommensurate Material
Paul Freeman, University of Central Lancashire, UK
67. The 4×4 transfer matrix method: a flexible and computationally efficient tool for exploring a system's surface magnon polaritons
Nathan Hale, NTNU, Norway
68. Sexithiophene (6T) spinterface formation on Fe and Fe oxide surfaces
Maha Alotaibi, University of York, UK
69. Magnetic field shaping for quantum devices
Peter Hobson, University of Nottingham, UK
70. Materials Optimisation for Next Generation Low Power Electronic Devices
Ieuan Wilkes, University of York UK
71. Nonlinear spin Hall current in two-dimensional WTe₂
Habib Rostami, University of Bath, UK
72. Transient retrograde motion of spin wave-driven skyrmions in magnetic nanotracks
Lin Huang, University of Leeds, UK