

Opportunities for Quantum Materials Research at Diamond-II
Orchid Meeting Room, Milton Hill Hotel
13th September 2018

09.30 Coffee and Registration

10.00 Introduction and Opening Comments
Andy Dent, Diamond Light Source

10.10 Diamond-II and the Magnetic Materials Group
Sarnjeet Dhesi, Diamond Light Source

Session 1 : The Diamond-II Machine Upgrade Chair : Steve Collins

10.20 Diamond II layout and performance
Riccardo Bartolini, Diamond Light Source

Session 2 : Excitations and Dynamics Chair : Kejin Zhou

10.45 Soft x-ray spectroscopy beamline: before and after the EBS ESRF upgrade.
Nick Brookes, European Synchrotron Radiation Facility, Grenoble

11.10 Ultrahigh-Resolution Resonant Inelastic Soft X-ray Scattering for Quantum Materials
Di-Jing Huang, National Synchrotron Radiation Research Centre, Taiwan

11.35 Statics and dynamics of Néel skyrmions in chiral magnetic multilayers
Chris Marrows, University of Leeds

12.00 Discussion

12.30 Lunch

Session 3 : Magnetic Imaging Chair : Sarnjeet Dhesi

13.30 Magnetoelectric imaging of multiferroic heterostructures
Massimo Ghidini, University of Cambridge

13.55 Domain walls in magnetic nanowires
Tom Moore, University of Leeds

14:20 Imaging the electrical control of antiferromagnetic domains and domain walls in CuMnAs
Peter Wadley, University of Nottingham

14.45 Imaging Vortex/Meron Pairs in a planar α -Fe₂O₃/Co Heterostructure
Noah-Waterfield Price, University of Oxford

15.05 Discussion

15.30 Coffee

Session 4 : Magnetic Scattering Chair : Paul Steadman

16.00 Resonant X-Ray Dichroism Extinction Effect - Measurement of Chirality and Beyond
Shielei Zhang, University of Oxford

16.25 Magnetisation dynamics in nanostructures and devices
Stuart Cavill, University of York

16.50 Diamond-II for hard x-ray resonant and magnetic scattering
Steve Collins, Diamond Light Source

17.15 Discussion

17.45 Close of workshop