Condensed Matter Physics in the City 2013
4th Hubbard Theory Consortium London Summer Programme in Condensed Matter Physics
Week 4 (July 1- July 5)

Magnetism

Monday, July 1: 11 Bedford square, London, WC1B 3RF

09:00 - 10:15 Coffee/Tea
10:15 - 11:15 Yong-Baek Kim (University of Toronto)
Emergent quantum phases with correlation and strong spin-orbit couplings
Discussion
11:15 - 12:00 Lunch Break

13:30 - 14:00 Coffee/Tea
14:00 - 14:30 Will Branford (Imperial College)
Electrical and Magnetic Charge transport in Artificial Spin Ice Nanostructures
Discussion
14:30 - 15:00 Discussion
15:00 - 15:30 Oleg Petrenko (University of Warwick)
Low-Temperature Magnetism in the Honeycomb System SrRE2O4
Discussion

Tuesday, July 2: 11 Bedford square, London, WC1B 3RF

09:00 - 10:15 Coffee/Tea
10:15 - 11:15 Christian Pfleiderer (TU Munich)
Emergence, stability and decay of skyrmions in chiral magnets
Discussion
11:15 - 12:00 Lunch Break

13:30 - 14:00 Coffee/Tea
14:00 - 15:00 Tim Ziman (Institut Laue-Langevin Grenoble)
Anomalous transport and the spin Hall effect in ferromagnetic metals near the Curie temperature
Discussion
15:00 - 16:00 Discussion

Wednesday, July 3: 11 Bedford square, London, WC1B 3RF

09:00 - 10:15 Coffee/Tea
10:15 - 11:15 Shivaji Sondhi (Princeton University)
Kibble-Zurek Scaling and String-Net Coarsening in Topologically Ordered Systems
Discussion
11:15 - 12:00 Lunch Break

13:30 - 13:30 Coffee/Tea
13:30 - 14:00 Gareth Conduit (University of Cambridge)
Ferromagnetic spin correlations in a few-fermion system
Discussion
14:00 - 14:30 Discussion
14:30 - 15:00 Mark Green (University of Kent)
Tuning New Magnetic Systems
Discussion
15:00 - 15:30 Discussion

Thursday - Friday, July 4-5: Cosener’s House, Abingdon, Oxfordshire

Theoretical and Experimental Magnetism Meeting