

Programme for SIG Meeting: Workshop on Unconventional Superfluids

Lancaster University, 13-14 September 2018

Organisers: Janne Ruostekoski and Viktor Tsepelin

Thursday 13th September Room A07, Physics Building

12:50 – 13:00 Welcome

Session Chair: **Hayder Salman**

13:00 – 13:30 **John Saunders** – Royal Holloway – “³He introduction”

13:30 – 14:00 **Giovanni Barontini** – Birmingham University – "Interactions in spinor condensates: from cold atoms to neutron stars"

14:00 – 14:30 **Vladimir Eltsov** – Aalto university – “Topological objects in superfluid ³He: vortices and other structures”

14:30 – 15:00 **Coffee break**

Session Chair: **Nikolaos Proukakis**

15:00 – 15:30 **Ryan Barnett** – Imperial College London – “Spinor condensates: symmetries, defects and dynamics”

15:30 – 16:00 **Nissinen Jaakko** – Aalto University – “Topological superfluid ³He: from Bogoliubov-Fermi surfaces to relativistic fermions and anomalies”

16:00 – 16:30 **Paul Sutcliffe** – Durham University – “Topological Solitons: from nuclei to magnetic media”

16:30 – 17:00 **Coffee break**

Session Chair: **Andrei Golov**

17:00 – 17:30 **Dmitry Zmeev** – Lancaster University – “Superfluidity beyond the Landau velocity in ³He-B and Dynamics of Surface States”

17:30 – 18:00 **Lewis Williamson** – Lancaster University – “Coarsening and non-equilibrium dynamics in atomic spinor Bose-Einstein condensates”

18:00 – **Dinner Foyer of Physics Building**

Friday 14th of September Room A07, Physics Building

Session Chair: **Volodya Eltsov**

09:00 – 09:30 **Magnus Borgh** – University of East Anglia – “Possibilities for non-Abelian vortices in spin-2 and 3 Bose-Einstein condensates”

09:30 – 10:00 **Lev Levitin** – Royal Holloway – "Superfluid helium-3 under confinement"

10:00 - 10:30 **Coffee break**

Session Chair: **Ryan Barnett**

10:30 – 11:00 **Mark Dennis** – Birmingham University – “Hopfions in darkly focused light”

11:00 – 11:30 **Andrei Golov** – Manchester University – "Chirality of superfluid ³He-A"

11:30 – 12:00 **Mikko Möttönen** – Aalto University – “Three-dimensionally non-trivial topological structures in spin-1 Bose-Einstein condensates”

12:00 - 12:30 **Coffee break**

Session Chair: **Magnus Borgh**

12:30 – 13:00 **Samuli Autti** – Lancaster University – “Time crystals, Q-balls, and exotic particles – magnon BEC as a vessel in the ³He universe”

13:00 – 13:30 **Nugzar Suramlishvili** – University of Bristol – “Unusual coherently precessing states in ³He-B”

13:30 – 14:00 **Janne Ruostekoski** – Discussion Session

14:00 – 14:10 Closing Remarks