Theory of Condensed Matter Group Scientific Meeting

University of Warwick, Wednesday 1st June 2016

10.30	Arrival and Coffee
11.00	**Hai-Qing Lin**, Beijing *Study of Superconductivity in Aromatic Hydrocarbons*
11.50	**Sania Jevtic**, Imperial *Disentangling entangled quantum states*
12.40	Lunch
13.40	**Mike Cates,** Cambridge *What is the pressure of an active suspension?*
14.30	Posters (including student poster prize) with tea at 15.30
16.10	**Hannah Price**, Trento *Synthetic Gauge Fields in Synthetic Dimensions with Ultracold Atoms and Integrated Photonics*
17.00	Close

The meeting will be held off the Warwick Science Concourse.
The ordering of speakers is subject to revision.

Organised by Andrew Morris & Mike Payne, *Cambridge*,
Nicholas d'Ambrumenil, *Warwick*

Registration + further details: theory.warwick.ac.uk/events/iop2016

POSTERS

1. Universality and quantized response in bosonic mesoscopic tunneling, Shaoyu Yin and Benjamin Beri, *Birmingham*

2. Dimensionless ratios: characteristics of quantum liquids and their phase transitions, Rudolf Roemer, *Warwick*

3. Quantum Multicriticality, G. T. Oliver and A. J. Schofield, *Birmingham*

4. Towards a Categorization of Dynamics in Kitaev Quantum Spin Liquids, A. Smith, J. Knolle, D.L. Kovrizhin, *Cambridge* J.T. Chalker, *Oxford*, R. Moessner*, Dresden*

5. Energy exchange between quasi-solitons and rogue waves generation, Antonino Savojardo, *Warwick*

6. Monopole dynamics following thermal quenches in spin ice, Marianne Laroche and Claudio Castelnovo, *Cambridge*

7. Thermoelectric properties of graphene rings, Marta Saiz Bretin, *Warwick*

8. Intertwined Superfluid/CDW Order in 2D He4 Films, Simon Lieu, Andrew Ho, Derek Lee, *Imperial*

9. Temperature-dependent properties of rare earth transition metal permanent magnets, Christopher E. Patrick, Eduardo Mendive Tapia, Leon Petit & Julie B. Staunton, *Warwick*

10. A Phenomenological Model for Dense, Non-Brownian Suspension Microstructure, R. N. Chacko, R. Mari, S. M. Fielding, *Durham,* and M. E. Cates, *Cambridge*

11. Simulating Soft-Matter with Stochastic Wavelet Hydrodynamics, O T Dyer and R C Ball, *Warwick*

12. Zero temperature ground states of repulsive particles on a cylindrical geometry, A. A. Tomlinson and N. K. Wilkin, *Birmingham*

13. Band-structure effects in vertical layered-material heterostructures, Gabriel C. Constantinescu and Nicholas D. M. Hine, *Warwick*

14. Transport Properties of Chern Insulators Out-of-Equilibrium, M. D. Caio, N. R. Cooper, M. J. Bhaseen, *Cambridge*

15. Phase Change of SnTe Extreme Nano-Wires Encapsulated in Single-Walled Carbon Nanotube, A.I. Vasylenko, D. Quigley, A.J. Morris, J. Wynn , P.V. Medeiros and J. Sloan, *Warwick*

16. Metamagnetism in Strontium Ruthenate, Matthew Robson, Martin Long, *Birmingham*

17. Ab initio metal-insulator transition in doped silicon, Edoardo Carnio, *Warwick*

18. Correlations in Stacked, Frustrated Triangular Ising systems, Dillon Liu, *Oxford*

19. Transport signatures of interacting fermions in quasi-one-dimensional topological superconductors, Dganit Maiden, Alessandro Romito, Piet W. Brouwer, *Warwick*

20. Colloidal Systems - Gravitational Rainbows, Jack Gartlan, *Birmingham*

21. Mobile impurity approach to the optical conductivity in the Hubbard chain, Thomas Veness, *Oxford*