

Day 1 – Monday, 5 June 2017	
08.00 – 09.00	Registration
Opening Ceremony	
09.00 – 09.15	Welcome Address by: Kok Khoo Phua (Institute of Advanced Studies, NTU) Jorge José (Indiana University) Mike Gunn (University of Birmingham)
Session Chair: Kok Khoo Phua (Institute of Advanced Studies, NTU)	
09:15 – 10:00	Thierry Giamarchi (University of Geneva) <i>Clean and Dirty Bosons in 1D Lattices</i>
10:00 – 10:45	Rosario Fazio (Scuola Normale Superiore) <i>Majorana Quasi-Particles with Fermionic Cold Atoms in Optical Lattices</i>
10:45 – 11:30	Group Photo & Coffee Break
Session Chair: Rosario Fazio (Scuola Normale Superiore)	
11:30 – 12:15	J. Michael Kosterlitz (Brown University) <i>Topological Defects and Phase Transitions</i>
12:15 – 13:00	Jorge José (Indiana University) <i>Theoretical Physics Developments After 1974 and Their Consequences for the Kosterlitz-Thouless Theory</i>
13:00 – 14:00	Lunch

Day 1 – Monday, 5 June 2017	
Session Chair: Thierry Giamarchi (University of Geneva)	
14:00 – 14:45	John Reppy (Cornell University) <i>Superfluidity, Phase Transitions, and Topology</i>
14:45 – 15:30	Wang Yao (The University of Hong Kong) <i>Topological Phenomena in the Moire Pattern of Van Der Waals Heterostructures</i>
15:30 – 16:00	Coffee Break
Session Chair: Shafiqque Adam (National University of Singapore)	
16:00 – 16:45	Arthur Hebard (University of Florida) <i>Heterogeneous Interfaces for Teasing out the Physics of Embedded Surface States</i>
16:45 – 17:30	Pieralberto Marchetti (University of Padova) <i>Attraction Between Topological Quantum Vortices as Origin of Superconductivity in Cuprates</i>
17:30 – 19:00	Poster Session @ Education Wing Atrium
18:00	Dinner at NTU Peach Garden (by invitation only)

**** Dinner at NTU Peach Garden**

Two-way transport will be provided. Invited guests please be reminded to gather at the NEC Guest Wing Lobby (Level 1) by 5.50pm.

Day 2 – Tuesday, 6 June 2017**Session Chair: Rainer Helmet Dumke** (School of Physical & Mathematical Sciences, NTU)

09:00 – 09:45	F. Duncan M. Haldane (Princeton University) <i>Geometry of Flux Attachment in the Fractional Quantum Hall Effect</i>
09:45 – 10:30	Nicolas Regnault (Ecole Normale Supérieure de Paris) <i>Emergent Particle-Hole Symmetry in Spinful Bosonic Quantum Hall Systems</i>
10:30 – 11:00	Coffee Break
11:00 – 11:45	Frank Pollmann (Technical University of Munich) <i>Dynamical Signatures of Quantum Spin Liquids</i>
11:45 – 12:30	Gerardo Ortiz (Indiana University) <i>Topological Superfluidity with Repulsive Fermionic Atoms</i>
12:30 – 13:45	Lunch
Session Chair: Jorge José (Indiana University)	
13:45 – 14:30	Christopher Lobb (University of Maryland) – Via SKYPE <i>Getting the Jump in the Kosterlitz-Thouless Transition</i>
14:30 – 15:15	Valerii Vinokour (Argonne National Laboratory, Lemont) <i>Topological BKT Phases in Disordered Materials</i>
15:15 – 15:45	Coffee Break

Day 2 – Tuesday, 6 June 2017

Session Chair: Lu Yu (Institute of Physics, Chinese Academy of Sciences)

15:45 – 17:15	Panel Discussion on Looking into the Future of Topological Phase Transitions <ul style="list-style-type: none">• Rosario Fazio (Scuola Normale Superiore)• F. Duncan M. Haldane (Princeton University)• J. Michael Kosterlitz (Brown University)• Nicolas Regnault (Ecole Normale Supérieure de Paris)• Valerii M. Vinokour (Argonne National Laboratory, Lemont)
18:00	Depart for Workshop Banquet at Orchard Hotel, Ballroom 3 (Level 3)
19:00 – 21:30	Workshop Banquet (by invitation only)

**** Workshop Banquet at Orchard Hotel**

Two-way transport will be provided. Invited guests please be reminded to gather at the NEC Guest Wing Lobby (Level 1) by 5.50pm.

Day 3 – Wednesday, 7 June 2017**Session Chair: Mike Gunn** (University of Birmingham)

09:30 – 10:15	Stephen Teitel (University of Rochester) <i>Phase Transitions: From Josephson Junction Arrays to Flowing Granular Matter</i>
10:15 – 11:00	Yidong Chong (Nanyang Technological University) <i>Topological Phase Transitions in Photonic Lattices</i>
11:00– 11:30	Coffee Break

Session Chair: Justin Song (Nanyang Technological University)

11:30 – 12:15	Mike Gunn (University of Birmingham) <i>Instabilities and Solitary Waves of Light and Atoms in Photonic Crystal Fibres</i>
12:15 – 13:00	Zohar Nussinov (Washington University in St. Louis) <i>A Universal Collapse of the Viscosity of All Supercooled Liquids as a Consequence of Equilibrium Melting Transitions</i>
13:00 – 14.15	Lunch

Session Chair: Pinaki Sengupta (School of Physical & Mathematical Sciences, NTU)

14:15 – 15:00	Baile Zhang (Nanyang Technological University) <i>Some Topological Phases for Sound</i>
15:00 – 15:45	Christos Panagopoulos (Nanyang Technological University) <i>Spin Topology Architectures in Low Dimensional Magnets</i>
15:45 – 16:15	Coffee Break
16:15 – 17:00	Philip W Phillips (University of Illinois at Urbana–Champaign) <i>Origin of Bose Metal in 2D Superconducting Films</i>
17:00– 17:45	Martin Freer (University of Birmingham) <i>The Influence of Topology in Nuclear Structure</i>
17:45 – 20:00	Dinner at Function Hall 1, Level 3 (above NEC Auditorium)

Day 4 – Thursday, 8 June 2017**Session Chair: Leong Chuan Kwek** (Institute of Advanced Studies, NTU)

09:00 – 09:45	Zidan Wang (The University of Hong Kong) <i>Realizing and Manipulating Topological Metals and Their Exotic Properties</i>
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09:45 – 10:30	Herbert Fertig (Indiana University) <i>Magnetic Ordering on the Surface of a Topological Crystalline Insulator</i>
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10:30 – 11:15	Coffee Break
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Session Chair: Xiong Chi (Institute of Advanced Studies, NTU)

11:15 – 12:00	John Saunders (Royal Holloway University of London) <i>Helium Films at Ultralow Temperatures: From Strongly Correlated Atomically Layered Films to Topological Mesoscopic Superfluidity</i>
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12:00 – 12:45	Yayu Wang (Tsinghua University) <i>Tuning Magnetism and Topology in Topological Insulators with Broken Time Reversal Symmetry</i>
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12:45 – 13:30	Justin Song (Nanyang Technological University) <i>Anomalous Collective Modes in Topological Matter</i>
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13:30	Lunch
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End of Workshop

Note: All talks include 5 minutes of Question and Answers.