

Conference on Topological Phases and Topological Quantum Computation

13 – 16 December 2017 (Wednesday – Saturday)
Lecture Theater P3, LG1/F, Chong Yuet Ming Physics Building

Announcement

In recent years, great progress has been made in the theoretical understanding and experimental realization of topological states. In particular, quantized zero bias conductance peaks possibly associated with Majorana zero energy modes have been observed in semiconductor/superconductor heterostructures. Evidence of chiral Majorana fermions in quantum anomalous Hall/superconductor heterostructures has also been reported. The half-quantized thermal Hall conductance has recently been observed which suggests that a non-Abelian fractional Hall state has been achieved experimentally. These works provide a foundation for the realization of non-Abelian braidings in condensed matter systems and provide platforms for fault-tolerant quantum computations. With the support of the Croucher Foundation and the Hong Kong Research Grants Council, we would like to gather experts in the area of topological phases and topological quantum computation in Hong Kong to discuss the most recent developments and future research directions in these areas.

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Registration:

<http://www.physics.hku.hk/croucher2017/tt/Registration.htm>

For enquiry:

Please contact
Miss Anna Wong (Conference Secretary) at annaylw@hku.hk

Invited Speakers

Anton Akhmerov (Delft University of Technology)
Ray Ashoori (Massachusetts Institute of Technology)
Leon Balents (University of California at Santa Barbara)
Erez Berg (The University of Chicago)
Joe Checkelsky (Massachusetts Institute of Technology)
Gang Chen (Fudan University)
Weiqiang Chen (Southern University of Science and Technology)
Meng Cheng (Yale University)
Xi Dai (The Hong Kong University of Science and Technology)
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Timothy Hsieh (Kavli Institute for Theoretical Physics)
Liang Jiang (Yale University)
Torsten Karzig (Station Q, Microsoft)
Leo Kouwenhoven (Delft University of Technology and Microsoft)
Gil-Ho Lee (Pohang University of Science and Technology)
Jian Li (Westlake Institute for Advanced Study)
Junwei Liu (The Hong Kong University of Science and Technology)
Roman Lutchyn (Station Q, Microsoft)
Vladimir Manucharyan (University of Maryland)
Yuji Matsuda (Kyoto University)
Roger Mong (University of Pittsburgh)
Yuval Oreg (Weizmann Institute of Science)
Andrew Potter (The University of Texas at Austin)
Pedram Roushan (Google Inc.)
Masatoshi Sato (Kyoto University)
Lucile Savary (Massachusetts Institute of Technology)
Shunqing Shen (The University of Hong Kong)
Ady Stern (Weizmann Institute of Science)
Jeffrey Teo (University of Virginia)
Kang Wang (University of California at Los Angeles)
Xiaogang Wen (Massachusetts Institute of Technology)
Cenke Xu (University of California at Santa Barbara)
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