



Topological Insulators & Superconductors

New Frontiers in Low-Dimensional Systems Program

3-5 November 2010

Jadwin Hall, Fourth Floor, Room 407

Topological Insulators and Superconductors have quickly grown to be one of the most interesting fields of research in recent years. These materials are bulk insulators but have holographic edge or surface states which are robust to disorder and impurities. These materials have captured the attention of researchers from different research fields, such as condensed matter and high-energy physics. The Princeton Center for Theoretical Science workshop on Topological Insulators and Superconductors will gather the world-leading researchers in this field to present recent experimental and theoretical progress and investigate future research directions. Emphasis will be placed on experimental investigation of the surface states, their spectral, transport, and STM properties, on the possible theoretical and experimental realization of Majorana fermions in both topological superconductors and topological insulators coated with a normal superconductor, on the properties of the magneto-electric polarizability (theta term) and on topological defects in these remarkable materials. The goal of the program is to further the development of the field of Topological Insulators and Superconductors by fostering an environment of where unconventional, forward-looking ideas are presented.

For more information, and to register, please visit:
<http://www.physics.princeton.edu/pcts/>

Organizers: Dmitry Abanin, Andrei Bernevig, Shivaji Sondhi, Ali Yazdani

Speakers

Yoichi Ando, Osaka University, Japan
Andrei Bernevig, Princeton University
Marcel Franz, University of British Columbia
Liang Fu, Harvard University
F. Duncan M. Haldane, Princeton University
M. Zahid Hasan, Princeton University
Charlie Kane, University of Pennsylvania
Aharon Kapitulnik, Stanford University
Andreas Ludwig, University California, Santa Barbara
Laurens Molenkamp, Wurzburg University, Germany

Joel Moore, Berkeley University
Naoto Nagaosa, University of Tokyo, Japan
N. Phuan Ong, Princeton University
Jeff Rogers, DARPA/MTO
Hidenori Takagi, University of Tokyo, Japan
Ashvin Vishwanath, Berkeley University
Qikun Xue, Tsinghua University, China
Ali Yazdani, Princeton University
Shoucheng Zhang, Stanford University

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