



ASPEN CENTER FOR PHYSICS

2013 WINTER CONFERENCE

ON

CONDENSED MATTER PHYSICS

January 13 – January 18, 2013

Sunday evening reception

Meetings Monday morning through Friday noon

TOPOLOGICAL STATES OF MATTER

Topologically ordered phases represent a departure from the well-established Landau paradigm of broken symmetries. They cannot be described by local order parameters, yet they have many peculiar properties clearly distinguishing them from the conventional quantum-disordered phases. One of their most interesting aspects is the appearance of exotic quasiparticles obeying non-Abelian braiding statistics.

This winter conference will focus on topologically ordered phases of matter, their experimental signatures, and possible ways of utilizing them as platforms for topologically-protected quantum computation. It will encompass three major directions of the interdisciplinary research in this field: fractional quantum Hall systems, topological insulators and superconductors, and topological quantum information processing. The aim of this conference is to bring together researchers working on different subjects related to topological states of matter and encourage research driven interaction between them, further stimulating new ideas and approaches in this rapidly developing field.

Application deadline is October 30, 2012

Conference Website: physics.ucr.edu/~shtengel/ACP2013

Please complete your application at www.aspenphys.org

ORGANIZERS:

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The Aspen Center for Physics is committed to a significant participation of women and under-represented groups in all of its programs.

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