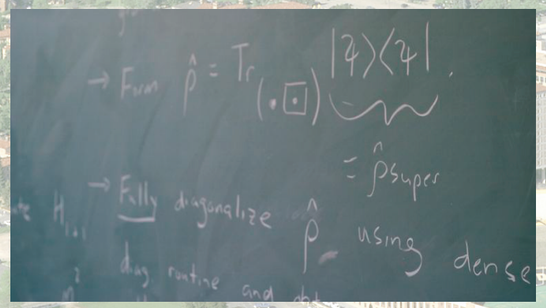
# Boulder School for Condensed Matter and Materials Physics

## Computational and conceptual approaches to quantum many-body systems

## July 6-July 30, 2010

**The 2010 summer school will cover a broad range of modern numerical approaches to strongly correlated quantum many-body systems and materials. This will also include novel ideas coming from the quantum information community, in particular various approaches based on tensor network states and entanglement renormalization methods. These method-oriented presentations will be complemented by a substantial number of phenomenological and application oriented lectures.**

**Adrian Feiguin, U. Wyoming**
**Matthew Fisher, Caltech**
**Matt Hastings, Microsoft Station Q**
**David Huse, Princeton**
**Andreas Läuchli, MPI Dresden**
**Patrick Lee, MIT**
**Roger Melko, U. Waterloo**
**Andrew Millis, Columbia**
**Ashwin Nayak, U. Waterloo**
**Gil Refael, Caltech**
**Ulrich Schollwöck, Munich**
**Thomas Schulthess, Oak Ridge**
**Barbara Terhal, IBM Watson**
**Simon Trebst, Microsoft Station Q**
**Nandini Trivedi, Ohio State U.**
**Matthias Troyer, ETH Zurich**
**Frank Verstraete, Vienna**
**Ashvin Vishwanath, UC Berkeley**
**Philipp Werner, ETH Zurich**
**Steven White, UC Irvine**




Scientific Organizers:
Matt Hastings (Microsoft Station Q)
Barbara Terhal (IBM Watson)
Simon Trebst (Microsoft Station Q)
Matthias Troyer (ETH Zurich)
Steven White (UC Irvine)
Local Organizer: Leo Radzihovsky (CU Boulder)

The school will pay for most local expenses, and there are travel grants available for participants from U.S. universities. Students and postdocs interested in participating should submit an electronic application by the February 27 deadline. The application form, and detailed information regarding housing, travel and financial support are available at

**http://boulder.research.yale.edu/**

The Boulder School in Condensed Matter and Materials Physics provides expert training, not usually available within the traditional system of graduate and post-graduate education, for advanced graduate students and postdoctoral researchers working in condensed matter physics, materials science and related fields. The School is supported by the National Science Foundation, with additional funding provided by the University of Colorado, and meets annually during July in Boulder, Colorado.