Boulder School for Condensed Matter and Materials Physics

Coherence and Interactions in Atomic and Condensed Matter Systems

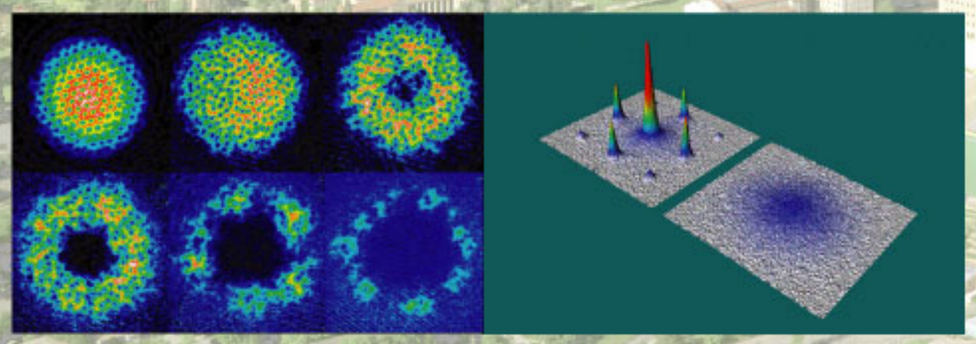
July 5 - July 30, 2004

E. Cornell
S. Girvin
M. Greiner
S. Haroche
R. Hulet
A. Imamoglu
D. Jin
W. Ketterle*
L. Levitov
C. Nayak
N. Read
S. Sachdev
D. Wineland
S. Yelin
P. Zoller

Review of Bose-Einstein Condensation
- *BEC in Optical Lattices*
- *Quantum Phase Transitions*
- *Feshbach Resonances and Molecular Condensates*
- *Rotating BECs*
- *Topological Order*
- *Cold Fermions*

Novel Trends in Quantum Optics
- *Cavity QED*
- *Trapped Ions*
- *Semiconductor Quantum Optics*

Quantum Coherence in Mesoscopic Systems
- *Superconducting quantum bits*
- *Quantum dots*
- *Noise and Correlations*



*to be confirmed

Scientific Organizers:
Eugene Demler, Mikhail Lukin, Ehud Altman,
Eric Cornell and Steven Girvin.
Local Organizer: Leo Radzihovsky.

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 March 1 deadline. The application form, and detailed information regarding housing, travel and financial support are available at

http://research.yale.edu/boulder

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 NIST, and meets annually during July in Boulder, Colorado.