Boulder School for Condensed Matter and Materials Physics

Strongly Correlated Materials

June 30-July 18, 2008

The 2008 school will be devoted to the behavior of strongly correlated materials. The hunt for new forms of collective behavior in materials, in the form of new phases, the quest for higher Tc superconductors, the study of liquid helium and ultra-dilute atomic gases, and the discovery of new quantum critical states of matter, is a major frontier field of condensed matter and materials physics today.

The 2008 school presents a leading team of experimental and theoretical condensed matter physicists to lecture on diverse aspects of this burgeoning field of research. Topics to be covered include fundamentals of Fermi liquid theory, magnetism and low dimensional materials, diverse methods of spectroscopy and transport measurements and the link with strongly correlated physics of atom traps.

P. Armitage (Johns Hopkins University)
L. Balents (Univeristy of California, Santa Barbara)
C. Bourbonnais (University of Sherbrooke)
P. Canfield (Ames Laboratory)
P. Coleman (Rutgers University)
D. Dessau (University of Colorado)
D. Jin (University of Colorado and JILA)
B. Keimer (MPI-FKF Stuttgart)
G. Kotliar (Rutgers University)
K. Le Hur (Yale University)
A. Millis (Columbia University)
V. Mitrovic (Brown University)
M. Mostovoy (Groningen University)
L. Radzihovsky (University of Colorado)
T. Senthil (MIT)
R. Shankar (Yale University)
P. Ong (Princeton University)
A. Yazdani (Princeton University)

Scientific Organizers:
Collin Broholm (Johns Hopkins University),
Piers Coleman (Rutgers),
Allan MacDonald (University of Texas, Austin),
Ashvin Vishwanath (University of California, Berkeley)
Local Organizer: Leo Radzihovsky (Colorado)

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 29 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.