

Invited Seminar
Florida State University, Department of Physics and
National High Magnetic Field Laboratory
Tallahassee, FL
January 14, 2004

Title & Abstract:

Frontiers of Magnetic Neutron Scattering

Thermal and cold neutrons have wavelengths characteristic of interatomic spacings in real materials and energies comparable to those of collective excitations. The magnetic moment of the neutron therefore makes it the probe par excellence of the structure and excitation of magnetic systems. With the construction of the new Spallation Neutron Source and the upgrade of the High Flux Isotope reactor well underway the next decade will see unprecedented opportunities for neutron research in the USA. Here I will describe some examples of recent applications of neutron methods to problems of current interest, and outline some possible directions for future research.