

Physics Colloquium

UNIVERSITY OF MISSOURI-KANSAS CITY
DEPARTMENT OF PHYSICS

Professor Owen Vajk
Department of Physics
University of Missouri-Columbia

Combining Magnetism and Ferroelectricity

Both magnetism and ferroelectricity are common in nature, but materials with both types of order (known as multiferroics) are very rare. Such materials can have extremely large magnetoelectric susceptibilities: the magnetism can change with the application of an electric field and the ferroelectricity can change with the application of a magnetic field. These effects are driven by coupling between the magnetic and ferroelectric orders, but this coupling is not well understood. This talk will present an introduction to multiferroics and discuss how neutron scattering is being used to shed light on the magnetic-ferroelectric interactions.

Physics Department
Robert H. Flarsheim Science & Technology Hall
5110 Rockhill Road
University of Missouri-Kansas City

September 5, 2008

Coffee at 3:10, Colloquium at 3:30 in Room 310