DEPARTMENT OF PHYSICS AND ASTRONOMY

CONDENSED MATTER SEMINAR

Friday, April 22, 2016
3:30 PM, Room 203 Physics
Refreshments 3:00 PM, Room 242 Physics

Professor Giti Khodaparast
Physics Department, Virginia Tech

Magneto-Optical and Ultrafast Optical Phenomena in Condensed Matter

Magneto-optical and time resolved spectroscopy are extremely powerful tools and have provided crucial information on matter, its properties, structure, and dynamics. The confinement of electrons in nanostructured materials or in a strong magnetic field can result in fascinating phenomena for quantum optics and condensed matter physics, in which electronic states can be designed and controlled. My group, using state-of-the-art spectroscopic techniques, studies magneto-optical and ultrafast optical phenomena in these artificial materials, and several examples of our activities, in the area of narrow gap ferromagnetic semiconductors and multiferroic materials, will be presented in this talk.