

Department of Physics & Astronomy

Dr. Mike Whangbo

Department of Chemistry, North Carolina State University

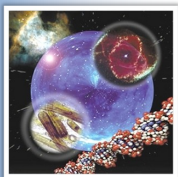
Friday, November 9, 2012

3:15 p.m. - 4:15 p.m.

BB 3.04.06

**Density Functional Analysis of the Magnetic and
Electronic Properties of Several Magnetic Solids:
Apparently Puzzling Observations**

Recently we have studied the magnetic and electronic properties of several magnetic solids on the basis of density functional calculations. In this presentation, we describe apparently puzzling observations that emerge from our studies. These include the nature of the interactions between rare earth and transition-metal ions in RMnAsO ($R = \text{Ce}, \text{Nd}$) and CeCrO_3 , the origin of the ferromagnetism in $\text{Sr}_3\text{YCo}_4\text{O}_{10+d}$, and the dimensionality of magnetism in Li_3RuO_4 .



Department Contact Information

Dr. Marcelo Marucho • 210.458.7862 • Marcelo.Marucho@utsa.edu

Nakia Scott 210.458.5698 Nakia.Scott@utsa.edu