



## **Micromagnetic Modeling: A Tale of Two Systems Exchange-Spring Coupling in SmCo<sub>5</sub>:Co Alloys & FePt Nanocluster Morphology**

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Micromagnetic modeling allows researchers to delve into the magnetic behavior of materials at the submicron scale. Micromagnetic theory provides a bridge between conceptual understanding and experimental results. There are three open-source micromagnetic computer modeling software packages available, each with its own strengths and weaknesses. These programs were used to look at exchange-spring behavior in SmCo<sub>5</sub>:Co as well as the effects FePt nanocluster morphology on the magnetic properties of the clusters. Results will be presented, along with plans for the immediate future.

**Friday, July 10, 2009  
201 Brace Lab  
1:30 p.m.**

Host: Prof. Jeff Shield

