



## Glenn T. Seaborg Center Seminar

### Intermediate Valence in Yb Intermetallic Compounds

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**Wednesday, 12 April 2006**  
**4:00–5:00pm**  
**Building 70A, Room 3377**

#### Abstract

This talk concerns rare earth intermediate valence (IV) metals, with a primary focus on certain Yb-based intermetallics. The ground state is that of a heavy mass Fermi liquid. The transport, optical conductivity and de Haas van Alphen signals reflect the existence of a Fermi surface with large effective masses. On the other hand, properties such as the susceptibility, specific heat, valence and spin dynamics that are dominated by the spin fluctuations, which are highly localized, can be understood qualitatively (and sometimes quantitatively) as those of a collection of non-interacting Anderson/Kondo impurities. We will attempt to explain and justify these statements.

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