

*Chez Pierre*

Presents ...

**Wednesday, February 4, 2009**

**12:00pm**

**MIT Room 4-331**



**Paul Canfield**

*Iowa State University*

## **“Effects of pressure and doping on iron arsenic based superconductors”**

In this seminar I will review the recent discovery of superconductivity in the  $RFeAsO$  and  $AFe_2As_2$  compounds ( $R$  = rare earth and  $AE$  = alkali earth). Over the past year these FeAs-based materials have emerged as both promising and intriguing superconducting compounds.

In particular, I will focus on the effects of chemical substitution and applied pressure (hydrostatic and not) on the structural, magnetic, and superconducting phase transitions in these compounds.