

Abstract Submitted  
for the MAR09 Meeting of  
The American Physical Society

**Physical Properties in a 5-Band Spin Fluctuation Theory of Ferropnictides** GREG BOYD, SIEGFRIED GRASER, VIVEK MISHRA, PETER HIRSCHFELD, University of Florida — Within a 5 band spin fluctuation model for the ferropnictides, we give predictions for experimentally measurable quantities in the superconducting state. A BCS-RPA approach is used to examine the leading superconducting instabilities and determine the thermodynamically stable ground state. We then present results for superfluid density, nuclear magnetic relaxation, and Raman scattering.

Greg Boyd  
University of Florida

Date submitted: 19 Nov 2008

Electronic form version 1.4