

Abstract Submitted  
for the MAR10 Meeting of  
The American Physical Society

**Itinerant Antiferromagnetism in the Fe-Pnictides** VLADIMIR  
CVETKOVIC, YAN HE, CHANDRA VARMA, University of California, Riverside  
— We propose a model for the itinerant antiferromagnetism in the Fe-pnictides and,  
as a test for it, calculate the magnetic phase diagram. The model includes kinetic  
energy for the five orbitals of Fe and local Hund's rule and repulsion. We also hope  
to derive a free energy for the model so as to calculate the fluctuation spectra and  
explain the remarkable universal temperature dependence of the susceptibility above  
 $T_N$ .

Vladimir Cvetkovic  
University of California, Riverside

Date submitted: 28 Nov 2009

Electronic form version 1.4