

Abstract Submitted  
for the MAR09 Meeting of  
The American Physical Society

**Magnetic impurities in Graphene: Electronic structure and magnetic interaction** MOHAMMAD SHERAFATI, B. R. K. NANDA, S. SATPATHY, University of Missouri, Columbia — From density functional calculations using the LAPW method, we study the electronic structure of graphene in the presence of magnetic impurities and the interaction between the impurities mediated by the graphene electrons. The 3d transition metal impurities are considered. The results are interpreted in terms of the RKKY interaction and the Anderson impurity model.

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Date submitted: 21 Nov 2008

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