## Abstract Submitted for the MAR05 Meeting of The American Physical Society

Magnetic impurity in an itinerant Anti-Ferromagnet: Undressing the Kondo effect VIVEK AJI, CHANDRA VARMA, University of California at Riverside, ILYA VEKHTER, Louisiana State University — We study the undressing of the Kondo effect in the aniferromagnetic phase of an itinerant metal. Expressed in terms of the quasiparticles of the AF, the Kondo interaction induces a new relevant operator that leads to incomplete screening and the ground state is no longer a spin singlet. We show how this comes about by expressing the exchange Hamiltonian in terms of the irreducible representation of the square lattice antiferromagnet and performing a renormalisation group calculation to obtain the ground state properties.

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Date submitted: 30 Nov 2004 Electronic form version 1.4