

Abstract Submitted
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Impurity Induced Kondo-like Screening in Cuprates WEI CHEN,
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91405 Orsay, France, PETER J. HIRSCHFELD, Department of Physics, University
of Florida, PO Box 118440, Gainesville, FL 32611, USA — We study the magnetic
response of $t-t'-J$ model to a single nonmagnetic impurity using slave boson mean
field theory, with restricted Bogoliubov-de-Gennes(BDG) method which allows us
to deal with the strong correlations and reduction of order parameters around the
impurity self-consistently. The temperature dependence of the paramagnetic sus-
ceptibility χ follows a Kondo-like form $1/(T + \Theta)$, where the screening temperature
 Θ increases with increasing doping. Both this form and the magnitude of χ are
consistent with NMR experiments in the normal state of Zn doped YBCO.

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