

Abstract Submitted  
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**Electronic structure of electron doped BaAs<sub>2</sub>Fe<sub>2</sub> superconductors revealed by Angle Resolved Photoemission** P. VILMERCATI, I. VOBORNIK, M. UNNIKRISHNAN, A. FEDOROV, A. GOLDONI, G. PANACCIONE, A. SAFASEFAT, R. JIN, M.A. MCGUIRE, B.C. SALES, D.J. SINGH, D. MANDRUS, N. MANNELLA — The electronic structure in the normal state of Co-doped BaAs<sub>2</sub>Fe<sub>2</sub> superconductors has been measured by Angle Resolved photoemission (ARPES). Co doping on the Fe site results in electron doping [A. S. Sefat et al., Phys. Rev. Lett. 101, 117004 (2008)]. The data qualitatively reveal that Co-doping results in raising the chemical potential, as expected with electron doping. The Fermi surface topology and the possible relevance to the mechanism of spin fluctuation will also be discussed.

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