Abstract Submitted
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Specific Heat vs Field in the 30 K Superconductor $BaFe_2(As_{0.7}P_{0.3})_2$[1] G.R. STEWART, J.S. KIM, P.J. HIRSCHFELD, Physics/University of Florida, S. KASAHARA, LTM Center/Kyoto University, T. SHIBAUCHI, Physics/Kyoto University, T. TERASHIMA, LTM Center/Kyoto University, Y. MATSUDA, Physics/Kyoto University — Recently, superconductivity at 30 K has been reported [1] in P-doped $BaFe_2As_2$, with 1/3 of the As replaced by P. Magnetic penetration and thermal conductivity measurements [2] indicate a nodally gapped superconductor. We report here on measurements of the specific heat divided by temperature, C/T, as a function of field up to 15 T and down to 0.4 K in order to further investigate the nodal structure with another probe.

[1] S. Kasahara, et al., arXiv0905.4427.
[2] K. Hashimoto, et al., arXiv0907.4399.

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G.R. Stewart
Physics/University of Florida

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