Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Point-Contact Andreev Reflection Spectroscopy in Pt-Substituted BaFe2As2[1] STEVEN ZIEMAK, University of Maryland, XIAOHANG ZHANG, National Institute of Standards and Technology, TYLER DRYE, RICHARD GREENE, JOHNPIERRE PAGLIONE, University of Maryland — We have investigated the superconducting order parameter of BaFe2-xPtxAs2 using point-contact Andreev reflection spectroscopy (PCAR). The samples used were large single crystals with measured Pt concentrations consistent with optimal doping (x = 0.15). Junctions were made between gold or lead tips and the c-axis of the superconducting samples. Conductivity spectra were measured over a range of temperatures and fit to curves generated using the Blonder-Tinkham-Klapwijk (BTK) model for two gaps, one isotropic and one angle-dependent gap with nodes.

[1]Center for Nanophysics and Advanced Materials, Physics Department, University of Maryland, College Park

Steven Ziemak
University of Maryland

Date submitted: 11 Nov 2011 Electronic form version 1.4