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Temperature Dependence of Scanning Tunneling Spectroscopy on Single Crystal Ba($Fe_{1-x}Co_x$)$_2As_2$ ANG LI, Department of Physics and Texas Center for Superconductivity, University of Houston, JIHUA MA, Department of Physics and Texas Center for Superconductivity, University of Houston /Department of Physics, Boston College, JARED O'NEAL, Department of Physics and Texas Center for Superconductivity, University of Houston, A. SEFAT, M. MCGUIRE, B. SALES, D. MANDRUS, Oak Ridge National Laboratory, R. JIN, E. PLUMMER, Department of Physics and Astronomy, Louisiana State University, SHUHENG PAN, Department of Physics and Texas Center for Superconductivity, University of Houston, DEPARTMENT OF PHYSICS AND TEXAS CENTER FOR SUPERCONDUCTIVITY, UNIVERSITY OF HOUSTON TEAM, DEPARTMENT OF PHYSICS, BOSTON COLLEGE COLLABORATION, OAK RIDGE NATIONAL LABORATORY COLLABORATION, DEPARTMENT OF PHYSICS AND ASTRONOMY, LOUISIANA STATE UNIVERSITY COLLABORATION — Tunneling spectroscopic measurements on single crystal Ba($Fe_{1-x}Co_x$)$_2As_2$ were performed at temperatures from 1.5K to above the superconducting transition temperature. In this talk we will present the temperature dependence of the density of states along with detailed analyses of the low energy spectrum line shape, and the finite density of states at the Fermi energy. We will then discuss the possible pairing symmetries through numerical fittings with different models.

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