Abstract Submitted
for the MAR16 Meeting of
The American Physical Society

Transport Properties of Exfoliated BSCCO on LAO/STO Heterostructures[1] SYLVIA UJWARY, University of Pittsburgh, ERIN SUTTON, MASON GRAY, KENNETH BURCH, Boston College, JEREMY LEVY, University of Pittsburgh — We investigate the interaction between high-temperature superconductor $Bi_2Sr_2CaCu_2O_{8+\delta}$ (BSCCO) flakes deposited on the oxide heterostructure $LaAlO_3/SrTiO_3$ (LAO/STO). Conductive-atomic force microscope (c-AFM) lithography will be used to create nanowires at the LAO/STO interface that couple to the BSCCO. Through coupling of these materials, we will be able to study phenomena such as the proximity effect and coulomb drag.

[1]We gratefully acknowledge support from the NASA PA Space Grant Consortium (SU), and the National Science Foundation (Grant No. DMR-1410846)

Sylvia Ujwary
University of Pittsburgh

Date submitted: 06 Nov 2015 Electronic form version 1.4