Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Exploration of long-range spin-triplet correlations in superconductor/ferromagnetic hybrid systems[1] WILLIAM MARTINEZ, W.P. PRATT, JR., NORMAN O. BIRGE, Michigan State University — Since the prediction of long-range spin-triplet correlations (LRTCs) in superconductor/ferromagnet (S/F) systems,[1] their realization has been investigated by many groups. From F-N bilayers to intrinsic generation of spin-triplet through domain walls, there is wide interest in observing a signal at ranges beyond the tens of nm observed in earlier work.[2] In this work, we examine the propagation of LRTCs extrinsically generated through noncollinear magnetization, at long ($100nm$) length scales. We will report on our recent progress.
[1] A.F. Volkov, F.S. Bergeret and K.B. Efetov, Phys. Rev. Lett., **90**, 117006 (2003).
[2] T.S. Khaire, M.A. Khasawneh, W.P.Pratt, Jr, and N.O. Birge, Phys. Rev. Lett. **104**, 137002 (2010).

[1]Supported by the DOE-BES under grant DE-FG-02-06ER46341.

William Martinez
Michigan State University

Date submitted: 13 Nov 2013 Electronic form version 1.4