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Control of triplet supercurrent in superconductor/ferromagnet hybrid systems WILLIAM MARTINEZ, W.P. PRATT, JR., NORMAN O. BIRGE, Michigan State University — A lot of excitement has been generated in superconductor/ferromagnet (S/F) systems since long-range spin-triplet correlations (LRTCs) were predicted. [1] Despite the many breakthroughs so far in this field, the ability to control the triplet generation reliably still needs to be realized before these devices can be used in technological applications. One possible direction to control the state in such structures is to manipulate the magnetizations of the various F layers within, specifically to switch between colinear and non-colinear directions between the layers. In this work, we report on the progress made to control LRTC generation in such a way.
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[1]A.F. Volkov, F.S. Bergeret and K.B. Efetov, Phys. Rev. Lett., **90**, 117006 (2003)

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