

Abstract Submitted
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Au/Graphene/Nb Tunnel Structures NAN SUN, KRISTOF TAHY, DEBDEEP JENA, HUILI XING, STEVEN RUGGIERO, University of Notre Dame, DEPARTMENT OF PHYSICS TEAM, DEPARTMENT OF ELECTRICAL ENGINEERING TEAM — We report on work with Au/Graphene/Nb FET-type structures. Samples are created by e-beam lithography on electronic-grade oxidized Si substrates, using commercially prepared graphene flakes and epitaxial films on SiC. Raman scattering is used to verify the single-layer nature of samples under study. We discuss noise studies in these systems and the status of experiments designed to observe predicted oscillations in the tunnel conductance of samples, associated with Klein tunneling in the graphene films and Andreev reflections at graphene/lead interfaces.

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