## Abstract Submitted for the MAR12 Meeting of The American Physical Society

Toward a Passive Lossless on-Chip Circulator in the 4-8 GHz Range LAFE SPIETZ, JOSE AUMENTADO, NIST — We present further progress toward constructing a passive microwave circulator from Josephson junction circuits. We have designed, built and tested a circuit which demonstrates the basic properties required to construct a gyrator in the 4-8 GHz range. We describe the theory and present the data on this circuit and point to the path from these results to practical passive lossless on-chip circulators.

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