

Abstract Submitted
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Josephson Junction Circuits for Passive Non-Reciprocal Microwave Devices LAFE SPIETZ, NORM BERGREN, JOSE AUMENTADO, NIST — We propose a method for using Josephson junction circuits to build non-reciprocal passive microwave components. We show that strong analogies can be made between the physics of ferrites used in traditional passive non-reciprocal microwave devices (that of the gyroscope) and certain classes of Josephson junction circuits. We describe a simple circuit which demonstrates these physical principles, and present both theoretical experimental results on this circuit.

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