

Abstract Submitted
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Simulating quantum spin systems with superconducting electrical circuits EMILY PRITCHETT, MICHAEL GELLER, University of Georgia
— There is currently great interest in the simulation of quantum spin and lattice models using cold atoms. Motivated by experimental progress in the fabrication and control of superconducting electrical circuits and their use in quantum information processing, we investigate their use as simulators of quantum spin systems, and consider a wide family of spin models that can be simulated with existing Josephson junction devices.

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