

Abstract Submitted
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Probing an ensemble of superconducting devices ADAM SEARS, DAVID HOVER, THEODORE GUDMUNDSEN, JONILYN L. YODER, MIT Lincoln Laboratory, ARCHANA KAMAL, FEI YAN, SIMON GUSTAVSSON, Research Laboratory of Electronics, Massachusetts Institute of Technology, ANDREW KERMAN, WILLIAM OLIVER, MIT Lincoln Laboratory — We present experimental results on a system in which we use a flux qubit to probe an ensemble of weakly coupled superconducting devices. We employ standard qubit metrology techniques to reveal global device properties. In addition, we discuss the connection with engineered environmental decoherence. This work is sponsored by the Assistant Secretary of Defense for Research & Engineering under Air Force Contract FA8721-05-0002. Opinions, interpretations, conclusions, and recommendations are those of the authors and are not necessarily endorsed by the United States Government.

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