MAR12-2011-004924

Abstract for an Invited Paper
for the MAR12 Meeting of
the American Physical Society

**Atomic physics and quantum optics using superconducting circuits: from the Dynamical Casimir effect to Majorana fermions**[1]

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This talk will present an overview of some of our recent results on atomic physics and quantum optics using superconducting circuits. Particular emphasis will be given to photons interacting with qubits, interferometry, the Dynamical Casimir effect, and also studying Majorana fermions using superconducting circuits.

References available online at our web site:

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[1]Partial support from RIKEN, ARO, LPS, NSA, NSF, JSPS, JST, MEXT, and FIRST.