

Abstract Submitted  
for the MAR15 Meeting of  
The American Physical Society

**Phase noise of a cavity electromechanical oscillator at millikelvin temperatures** JUNHO SUH, SUNGWAN CHO, SANG GOON KIM, SEUNG-BO SHIM, Korea Research Institute of Standards and Science — The frequency stability of a mechanical resonator is an important factor in its application to quantum information technology. We investigate the phase noise in a self-oscillation of a micromechanical resonator, parametrically driven by a superconducting microwave resonator at millikelvin temperatures. Possible physical origins of the noise are also discussed.

Junho Suh  
Korea Research Institute of Standards and Science

Date submitted: 12 Nov 2014

Electronic form version 1.4