Abstract Submitted
for the MAR13 Meeting of
The American Physical Society

Cavity optomechanics in the quantum regime AMIR H. SAFAVI-NAEINI, SIMON GROEBLACHER, JEFF HILL, JASPER CHAN, OSKAR PAINTER, Caltech — We use coherent laser light to address the mechanical degrees of freedom of engineered nanostructures with record high efficiency. With sufficient cryogenic precooling, the effects of the quantum optical shot-noise coupled onto the mechanics, and its modification by the mechanical susceptibility can be probed. In this talk we present our recent experiments studying the quantum properties of such systems.

Amir H. Safavi-Naeini
Caltech

Date submitted: 28 Nov 2012 Electronic form version 1.4