

Nonclassical states and reservoir engineering in cavity optomechanics

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We discuss the generation and manipulation of nonclassical states of mechanical resonators and of optical fields obtained by tailoring the interaction of a cavity optomechanical system with its environment. In particular we shall discuss the application of reservoir engineering techniques for the generation of superposition states, squeezed and entangled states of mechanical resonators.

M. Asjad and D. Vitali, arXiv:1308.0259 [quant-ph]