

## Quantum optomechanics and squeezed light

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In recent years, optomechanical systems, where the radiation pressure of light is used to probe and change the dynamics of mechanical oscillators, have reached a regime where it is possible to observe basic quantum mechanical features [1,2,3]. In addition, the continuous measurement of the mechanical position can lead to squeezing of the noise fluctuations of the probe field below that of shot-noise, i.e. the vacuum noise of the light itself. Such squeezing, normally only observed in non-linear media, has recently been demonstrated in cold-atom gases [4] and mechanical resonators [5,6]. We would like to review some of the latest advances in the field of optomechanics, with a focus on the efforts to squeeze light.

### References

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