Mesoscopic Mechanical Systems:
New Resource for Quantum Technologies
and Fundamental Sciences

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Abstract

Quantum optomechanics is an emerging field in quantum science that aims to control quantum motions of mechanical objects using light-matter interactions. In recent years, the researchers have started gaining quantum control over several mesoscopic mechanical systems. This advancement opens exciting possibilities for developing new quantum technologies and for testing quantum physics beyond the microscopic world. In this talk, I will review recent progress in the field and discuss my group’s research in this direction.