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# A versatile quantum state generating device

Mehdi Abdi

Technische Universität München

### Abstract

Mechanical resonators in their quantum regime are of fundamental and technical interest. For harmonic resonators, accessing their quantum behavior requires strong coupling between the mechanical resonator and another controllable quantum system. In my talk, I will introduce a hybrid device composed of a superconducting qubit, a nano-beam, and a superconducting stripline resonator which allows for quantum controlling of the mechanical resonator in a variety of ways.