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**Quench dynamics in optomechanical arrays** SADEGH RAEISI, VITTORIO PEANO, FLORIAN MARQUARDT , University of erlangen-nuremberg — Optomechanical arrays are a novel quantum system that provide a promising tool for exploring many-body physics. The tunability of optomechanical arrays can be exploited for studying the non-equilibrium dynamics. Despite the technological challenges, experimental implementation of simple one-dimensional systems seems feasible in the next few years. Here we focus on the non-equilibrium dynamics of one-dimensional optomechanical arrays and investigate the quench dynamics in these systems. In particular, we study the topological properties and phases of these one-dimensional optomechanical arrays.

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