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Title: Holographic quenches with a gap

Abstract: In order to holographically model quenches with a gapped final hamiltonian, we consider a gravity-scalar theory in anti-de Sitter space with an infrared hard wall. We allow a time dependent profile for the scalar field at the wall. This induces an energy exchange between bulk and wall and generates an oscillating scalar pulse. We argue that such backgrounds are the counterpart of quantum revivals in the dual field theory. We perform a qualitative comparison with the quench dynamics of the massive Schwinger model, which has been recently analyzed using tensor network techniques. Agreement is found provided the width of the oscillating scalar pulse is inversely linked to the energy density communicated by the quench. We propose this to be a general feature of holographic quenches.