“Far from equilibrium energy flow in quantum critical systems”

We investigate far from equilibrium energy transport in strongly coupled quantum critical systems. Combining results from gauge-gravity duality, relativistic hydrodynamics, and quantum field theory, we argue that long-time energy transport after a local thermal quench occurs via a universal steady-state for any spatial dimensionality. This is described by a boosted thermal state. We determine the transport properties of this emergent steady state, including the average energy flow and its long-time fluctuations.

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