

Abstract Submitted
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Exact transient dynamics of the Anderson impurity ANDREY ANTIPOV, DONG QIAOYUAN, EMANUEL GULL, Univ of Michigan - Ann Arbor — We study dynamics of a single Anderson impurity model subject to voltage and thermal quenches. We develop a hybridization expansion diagrammatic Monte Carlo algorithm to describe the exact dynamics of the problem. By including the initial correlations into the problem we describe the destruction of the Kondo state and infer the characteristic time scales of the problem. An interplay between different time scales of spin and charge excitations of the strongly correlated setup as visible in the ultra-fast response is in the focus of our study. We compare our results with frequently employed non-crossing and one-crossing approximations.

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