Abstract Submitted for the MAR17 Meeting of The American Physical Society

Exact Quench Dynamics of Open System Kondo Model ROSHAN TOURANI, NATAN ANDREI, Physics Astronomy Department, Rutgers University — Motivated by recent cold atom experiments, we consider the quench dynamics in the Kondo system consisting of a Fermi sea (the lead) coupled via spin exchange to spin-1/2 impurity. Starting from an initial state where the lead and the impurity are decoupled, we calculate the time evolution of the system after the coupling is turned on. As an observable we compute the expectation value of impurity spin as a function of time. Moreover, we will discuss the ongoing efforts on computing the Loschmidt echo.

Roshan Tourani Graduate Student

Date submitted: 11 Nov 2016

Electronic form version 1.4