

We study electric field quench in $N = 2$ strongly coupled gauge theory, using the AdS/CFT correspondence. To do so, we consider the aforementioned system which is subjected to a time-dependent electric field indicating an out of equilibrium system. Defining the equilibration time t_{eq} , at which the system relaxes to its final equilibrium state after injecting the energy, we find that the rescaled equilibration time $k^{-1}t_{eq}$ decreases as the transition time k increases. Therefore, we expect that for sufficiently large transition time, $k \rightarrow \infty$, the relaxation of the system to its final equilibrium can be an adiabatic process. On the other hand, we observe a universal behavior for the fast quenches, $k \ll 1$, meaning that the rescaled equilibration time does not depend on the final value of the time-dependent electric field. Our calculations generalized to systems in various dimensions also confirm universalization process which seems to be a typical feature of all strongly coupled gauge theories that admit a gravitational dual.