

In this talk, I will present recent work of our research group arXiv:1407.1992. After a short introduction, I will review Near Horizon Extremal Geometries (NHEG), and their three universal (thermo)dynamic laws, based on arXiv:1310.3727. As it is expected, these (thermo)dynamic laws do not provide enough information to identify the microstates of the system (I mean by "system", the mentioned geometries as thermodynamic systems) under consideration. So, based on physical arguments, I will introduce conditions which perturbations/microstates around an NHEG should satisfy. It results perturbations to be uniquely identified as variation of the system in the parameter space of thermodynamic variable, i.e. no accountable perturbations to be considered as microstates of the system.