

ICTS Seminar

- Title : Periodically driven holographic CFTs
- Speaker : Alexandre Serantes, ICTS-TIFR, Bangalore
- Date : Friday, September 7, 2018
- Time : 11:30 AM
- Venue : Nambu Discussion Room (Left), ICTS Campus, Bangalore

Abstract : In this talk, I will discuss the behavior under periodic driving of holographic CFTs placed on compact spaces. The dual gravitational construction involves time-dependent geometries with global asymptotics supported by a massless scalar field. The driving is implemented by a harmonic variation of the scalar field non-normalizable mode.

First, I will illustrate that this system allows for exactly periodic geometries. Then, I will analyze the stability properties of these novel solutions and discuss the role they play in dynamical processes for which the driving amplitude and/or frequency become themselves nontrivial functions of time. Finally, I will comment on the late-time dynamics of the theory and elaborate on the different relaxation regimes that may appear.