



## ICTS String Seminar (HYBRID)

**Title** : Thermal one point functions in holography and large N-models

**Speaker** : Justin David (Indian Institute of Science, Bengaluru)

**Date** : Wednesday, 04<sup>th</sup> October, 2023

**Time** : 03:30 PM (IST)

**Abstract** : The properties of thermal one point functions are useful and interesting for AdS/CFT. This is shown through two examples, one involving gravitational physics in the bulk and the second by studying large N vector models. We study one point functions of a minimally coupled massive scalar of black holes in AdS. These are induced by coupling the scalar to the Weyl Tensor or the Gauss-Bonnet term. We show that though the evaluation of these one point functions only involves the geometry exterior to the horizon, it has properties that allow us to obtain certain features of the geometry interior to the horizon. We then study thermal one point functions of higher spin composite operators in  $O(N)$  vector model and the  $U(N)$  Gross-Neveu models at large N using the OPE inversion formula and show that they are universal both at large d and large spin.

**Venue** : **Offline:** Emmy Noether Seminar Room (ICTS)

**Online:** Please click the below link to join the seminar

<https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>