



## **ICTS String Seminar**

**Title** : Lessons from holography for open quantum systems

**Speaker** : Mukund Rangamani (UC Davis USA)

**Date** : Thursday, November 10, 2021

**Time** : 04:00 pm (IST)

**Abstract** : We describe general lessons one can glean about the effective dynamics of open quantum systems using holography. Specifically, we will argue that using holographic CFTs to provide thermal environments is a useful way to extract the broad physical principles. This turns out to be especially useful when the probe system long-lived gapless modes of the environment. To illustrate the ideas, we will also motivate a simple class of toy models that captures all the essential physics. As a corollary we also explain analytic properties of real-time thermal correlation functions.

**Venue** : **Hybrid Mode**

**Offline:** Madhava Lecture Hall

**Online:** Please click on the below link to join the meeting

<https://icts-res-in.zoom.us/j/84622316440?pwd=cGdRVXZLaXZMekNvbkFhK2l2WFpZdz09>

Meeting ID: 846 2231 6440

Passcode: 101022