



## **ICTS Astrophysical Relativity Seminar**

Title : The universe from the edge of the Dark Matter Halo

Speaker : Susmita Adhikary (KIPAC, Stanford University)

Date : 9<sup>th</sup> March 2021

Time : 09:00 am

Abstract : The evolution of galaxies is tied to the evolution of dark matter halos in the cosmic web. The galaxies we observe in the sky trace the underlying field of dark matter, laying out pieces of a puzzle that must come together to reveal a map and timeline of our universe. Understanding the formation and evolution of non-linear structure in the universe can shed light on some of the most fundamental questions in Cosmology. I will talk about how the distribution of matter in dark matter halos can help us understand the nature of gravity, dark matter and evolution of galaxies. In particular, I will focus on the splashback radius, a natural definition for the halo boundary. I will talk about recent developments, both from theoretical, and observational perspectives, and describe how current and future surveys will give us an exquisite view of the dynamics and evolution of dark matter halo.

Venue : Please click on the link to join the seminar

<https://zoom.us/j/92398360871?pwd=ZXJnaFVhR1pZY1JSYzNkdHFBeVFYZz09>

Meeting ID: 923 9836 0871

Passcode: 190867