



ICTS Astrophysics & Relativity Seminar

Title : Testing Theories of Gravity with Gravitational Wave Observations

Speaker : Akash Kumar Mishra (ICTS -TIFR, Bengaluru)

Date : Monday, 28th November 2023

Time : 10:00 AM (IST)

Abstract : The foundation of modern astrophysics rests on the remarkable success of General Relativity (GR) in explaining gravitational phenomena across a vast range of length scales. However, there are several reasons to suspect that GR is not a complete theory of gravity, which further motivates the consideration of various alternative theories. With the detection of gravitational waves by LIGO, theories of gravity are confronted with observations from strong and dynamic regimes. This provides an unprecedented opportunity to test various predictions of GR and beyond GR theories. In this talk I'll discuss some of my research along this direction. The first segment of my presentation will focus on the time domain likelihood construction and constraining beyond GR parameters from GW ringdown observation. The second part of my talk will provide a glimpse into my ongoing and future research directions.

Venue : Chern Lecture Hall & Online

Zoom link: <https://zoom.us/j/91771693785?pwd=ZHdpZlYxNGQ4WGx4bGJ5ZTVEV05yUT09>

Meeting ID: 917 7169 3785

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