



अंतर्राष्ट्रीय सैद्धांतिक विज्ञान केंद्र  
International Centre for Theoretical Sciences

टाटा मूलभूत अनुसंधान संस्थान

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भारत सरकार के परमाणु ऊर्जा विभाग की एक स्वायत्त संस्थान एवं समविश्वविद्यालय

An Autonomous Institution of the Department of Atomic Energy of Government of India and a Deemed to be University

## ICTS Astrophysics & Relativity Seminar

- Title** : Advances in Gravitational Waveform Modeling: Eccentricity, Precession, and Finite-Size Effects
- Speaker** : Samanwaya Mukherjee (ICTS-TIFR, Bengaluru)
- Date** : Thursday, 25 June 2026
- Time** : 3:30 PM – 5:00 PM (IST)
- Abstract** : As gravitational-wave detectors continue to improve in sensitivity, increasingly accurate waveform models are essential for extracting the full scientific potential of observations. Incorporating binary properties such as orbital eccentricity and spin precession is crucial for robust inference of source parameters, while systematic modeling of finite-size effects enables tests of the nature of compact objects. This talk will present recent advances in these areas of gravitational waveform modeling and discuss the challenges and opportunities that lie ahead.
- Venue** : Feynman Lecture Hall  
Zoom Link: <https://icts-res-in.zoom.us/j/95605681693?pwd=COXfuLps9K221K1jw3nBd3ay4e7uN.1>  
Meeting ID: 956 0568 1693  
Passcode: 252526