



ICTS

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THEORETICAL
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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Colloquium

Title : Atmospheric gravity waves: new observations, high-resolution simulations, and data-informed methods

Speaker : Aditi Sheshadri (Stanford University, USA)

Date : Wednesday, 21 October 2026

Time : 11:30 AM (IST)

Abstract : Atmospheric gravity waves are ubiquitous multiscale oscillations generated by flow over orography, moist convection, geostrophic imbalance, etc. They dynamically couple the different layers of the atmosphere, influence the position and strength of the tropospheric jet streams, and play a leading-order role in the stratosphere and mesosphere. However, much of the gravity wave spectrum remains unresolved in a typical climate model, and observational constraints on their activity are limited. I will discuss recent work in my group aimed at improving our understanding of the effects of gravity waves on climate variability and enhancing their representation in global climate models

Venue : Emmy Noether Seminar Room

ZoomMeeting: <https://icts-res-in.zoom.us/j/93595976447?pwd=985RvPNcUQKVbl8OXwM2HCW2zx9Fso.1>

Meeting ID: 935 9597 6447

Passcode: 618933