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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Thesis Defense Seminar

- Title** : Channel flow stability: influence of dust particles and geometry
- Speaker** : Anup Kumar (ICTS-TIFR, Bengaluru)
- Date** : Tuesday, 11 November 2025
- Time** : 10:30 AM (IST)
- Abstract** : The stability of channel flow is profoundly influenced by the introduction of dust particles and alterations in wall geometry. Though one system involves a small addition of particles to the flow and the other features slight geometric modifications, they are fundamentally different, displaying markedly distinct stability behaviors. Despite this, they share common underlying physics, with their stability controlled by critical layer dynamics. In this talk, I will discuss how the presence of dust particles and the modifications in wall geometry impact flow stability, with a particular focus on the underlying mechanisms driven by critical layer dynamics.
- Venue** : Zoom link: <https://icts-res-in.zoom.us/j/98098889877?pwd=1xeOya6bKuCopOXgmKHUtxamp4yvg.1>
Meeting ID: 980 9888 9877
Passcode: 112211