



ICTS Fluid Dynamics Seminar

- Title** : Is the monsoon a dynamical or thermodynamical system?
- Speaker** : Chetankumar Adappa Jalihal (Max Planck Institute for Meteorology, Hamburg, Germany)
- Date** : Wednesday, 30 October 2024
- Time** : 3:30 PM (IST)
- Abstract** : Traditionally, monsoons have been viewed as gigantic land-sea breeze suggesting that it is predominantly a dynamical feature of the atmosphere. However, this view entirely ignores the role of thermodynamics. Thermodynamics of the atmosphere drives convection and therefore cloud formation and rain. The modern understanding of monsoon is a coupled dynamic-thermodynamic system. In this talk, I will highlight the importance of radiative heating of the atmosphere, a crucial yet largely unaccounted ingredient of monsoon. Furthermore, I will show that atmospheric radiation and thermodynamics explain most of the monsoon evolution on centennial and longer timescales, whereas, atmospheric dynamics is important only on decadal and shorter timescales.
- Venue** : Emmy Noether Seminar Room
Zoom Link: <https://icts-res-in.zoom.us/j/92621391418?pwd=6YDOTbudav15mH4THCqE8g6i3rFFXL1>
Meeting ID: 926 2139 1418
Passcode: 202030