



TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Monsoon Seminar

Title : Waves to Weather

Speaker : Kondapalli Niranjan Kumar (National Centre for Medium Range Weather

Forecasting Ministry of Earth Sciences, India)

Date : Tuesday, 19th January 2021

Time : 03:30 pm (IST)

Abstract : Waves play fundamental roles in a broad range of dynamical processes

extending throughout the Earth's neutral atmosphere and ionosphere. The Earth's atmosphere can sustain many wave phenomena, starting from small-scale gravity waves to planetary-scale Rossby waves. While gravity waves are essential for understanding the entire general circulation of the atmosphere, the extratropical Rossby waves substantially impact various weather phenomena such as regional weather extremes and monsoon variability at different space-time scales. Besides, a particular class of tropical waves such as Kelvin-Rossby waves also modulate the intra-seasonal weather patterns. Therefore, both tropical and extratropical wave interactions are crucial for understanding the regional weather at sub-seasonal to interannual time scales. In this talk, I will focus on these waves' role in regional weather over the Indian and adjoining regions along with the implications of tropical-

extratropical wave interactions and associated mechanisms.

Venue : Please click on the below link to join the seminar

https://zoom.us/j/97288436703?pwd=c0Zic0Z1QmY3VkEzd2V5SEdoMEdDdz09

Meeting ID: 972 8843 6703

Passcode: 111367