

## ICTS Seminar

- Title : Dynamics of Monsoon Variability, Trends and Extremes
- Speaker : Raghu Murtugudde, University of Maryland, USA
- Date : Friday, 7<sup>th</sup> December, 2018
- Time : 3:00 PM
- Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore
- Abstract : Indian monsoon is notorious for its nakhras with the spatio-temporal distributions between the famed onset and the sedate withdrawal. El Niño and La Niña have positive and negative impacts, respectively, but only about 50% of the times. Now it is obvious that the tropical Atlantic Niño also impacts the Indian monsoon. The global feature known as the Intertropical Convergence Zone or the ITCZ seems to be the conveyor of tropical variability and has a peculiar split personality over the Indian Ocean during boreal summer months. Increased greenhouse gases are well manifest in the Indian Ocean warming but the aerosols/pollution appear to be damping the warming of the land leading a decrease in the mean monsoon. But the monsoon extremes have increased and also become more widespread. The causalities are discussed as well as the good, the bad and the ugly of the models used for monsoon predictions/projections as well as the role of ocean mixing in erroneous ITCZ in state-of-the-art climate models.