

ICTS Astrophysical Relativity Seminar

- Title** : Cool Core Cycles - Cold-mode AGN feedback in Galaxies, Groups and Clusters
- Speaker** : Deovrat Prasad (Michigan State University, US)
- Date** : Thursday, 13th October, 2022
- Time** : 03:00 pm (IST)
- Abstract** : In cool-core galaxy clusters the cooling time of the plasma in the intracluster medium (ICM) is smaller than their lifetime. In such systems precipitation of cold gas from the hot ICM and their subsequent infall and accretion onto supermassive black holes located in their central galaxy fuels outbursts of powerful jets called active galactic nuclei (AGN). AGN outbursts are powerful enough to compensate for the radiative losses of the ICM and regulate the star formation rate. In my talk, I will discuss the cooling - heating cycles in cool-core galaxy clusters. I will discuss some of the recent observations of ICM-AGN interaction in the most massive galaxy clusters like Phoenix and where do they fit in the standard AGN feedback scenario. I will also discuss the role of environmental factors on the ability of AGN feedback to self-regulate in smaller halos like massive galaxies.
- Venue** : **Hybrid Mode**
- Offline:** Feynman Lecture Hall
- Online:** Please click on the below link to join the seminar
- <https://icts-res-in.zoom.us/j/89166008854?pwd=SzdabDVEV1Y0WjdIMk56N1ROUTNEUT09>
- Meeting ID: 891 6600 8854
- Passcode: 132213