<u>ICTS Seminar (Online)</u>

Title : Deformation theory of tensor triangulated categories

Speaker : Angel Israel Toledo Castro (Université Côte d'Azur)

Date : Monday, 18th December 2023

Time : 10:00 AM (IST)

Abstract : Tensor triangulated categories have recently gained attention as an object of study in algebraic geometry, representation theory, and homotopy theory. In this talk we will discuss a deformation theory of these structures inspired by the deformation theory of tensor categories due to Davydov and Yetter which deforms the structural coherence data of the monoidal structure on such a category. To do this, we will exploit the Morita theorem for dg-categories and encode tensor structures in terms of a certain kind of dg-bimodules which we will then use to define a Davydov-Yetter complex of which its total cohomology can be seen to contain data of the infinitesimal first order deformations of the associativity data of our tensor triangulated categories.

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

https://icts-res-in.zoom.us/j/91960656376?pwd=K0lNT1JsbjRzenljY2k3blBOUUgwdz09

Meeting ID: 919 6065 6376

Passcode: 869238