

## ICTS Seminar

Title : Hilbert functions of Gorenstein K-algebras

Speaker : Shreedevi K. Masuti, Chennai Mathematical Institute, Chennai

Date : Friday, April 6, 2018

Time : 11:30 AM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : Gorenstein rings are very common and significant in many areas of mathematics. The classification, up to analytic isomorphism, of Gorenstein local K-algebras plays an important role in commutative algebra and algebraic geometry. The problem is very difficult even if we restrict the K-algebras to the Artinian. One of the most significant information on the structure of K-algebra is given by its Hilbert function. Recently, jointly with M. E. Rossi, we characterized the Hilbert functions of Gorenstein K-algebras in some cases (K-algebras of socle degree 4). In this talk, we will discuss this new development.