

SEMINARIO DI GEOMETRIA

22 Novembre 2017, h.11.30-12.30

Politecnico di Torino,
Dipartimento di Scienze Matematiche,
AULA BUZANO

Shreedevi K. Masuti

(Universita' di Genova)

Hilbert functions of Artinian level K -algebras

In this talk we will discuss the possible Hilbert functions of an Artinian level K -algebra (need not be graded) of codimension 3. We give a complete characterization of numerical sequences that can occur as the Hilbert functions of level (in particular, Gorenstein) algebras of socle degree 4. Moreover, in certain cases we construct Artinian Gorenstein algebras which are not canonically graded (that means are not isomorphic to their associated graded rings). This is my joint work with M. E. Rossi.

Financial support: PRIN 2015 - Geometry of Algebraic Varieties - protocollo: 2015EYP-TSB 007