

# CICLO DE PALESTRAS DA PÓS-GRADUAÇÃO

## PROGRAMA DE PÓS-GRADUAÇÃO EM MATEMÁTICA

Pedro Henrique Apoliano Albuquerque Lima  
Aluno de Doutorado- ICMC-USP

FALARÁ SOBRE

### Properties of the Fiber Cone

Given a Noetherian local ring  $(R; m)$  and an ideal  $I$  in  $R$ , there is a natural filtration  $\dots I^2 \subseteq I \subseteq R$ , called adic-filtration. One may construct a graded algebra  $F(I) = \bigoplus_{n \geq 0} I^n / mI^n$ , called fiber cone or special ring. Moreover, naturally it is possible to generalize this algebra by using any filtration of ideals  $\mathcal{F} : \dots I_2 \subseteq I_1 \subseteq R$ . It is denoted by  $F(\mathcal{F})$ . The goal of this talk is to speak about the Gorenstein property of  $F(\mathcal{F})$  and its Castelnuovo-Mumford regularity.

Quinta-feira, 8 de novembro  
16 horas

Departamento de Matemática  
Auditório