



SCUOLA  
NORMALE  
SUPERIORE

## SEMINARIO DI MATEMATICA

**giovedì 12 maggio 2016**

ore 11:00

Scuola Normale Superiore

Pisa

Aula Fermi

***Lucas Ambrozio***

*Imperial College London*

Terrà un seminario dal titolo:

# **“Morse index and Betti numbers of minimal hypersurfaces”**

**Abstract:**

*As critical points of the area functional, minimal hypersurfaces of Riemannian manifolds have a well-defined Morse index. In many situations, the knowledge of the index can be used to derive conclusions about the geometry and topology of the hypersurface itself. In this talk, we will show that under certain conditions on the ambient manifold, the index of its minimal hypersurfaces grows linearly with their first Betti numbers. The hypothesis on the ambient manifold are flexible enough to include all compact symmetric spaces of rank one and small graphical perturbations of the round sphere, for example. This is a joint work with A. Carlotto and B. Sharp.*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze  
Matematiche e Naturali