



SCUOLA  
NORMALE  
SUPERIORE

## SEMINARIO DI MATEMATICA

Giovedì 8 febbraio 2018  
ore 16:30

Scuola Normale Superiore  
Pisa  
Aula Pasquali

**Levi Lopes de Lima**

*(Universidade Federal do Ceará)*

terrà un seminario dal titolo:

### **“A Feynman-Kac formula on manifolds with boundary and geometric applications”**

**Abstract:**

*We present a Feynman-Kac-type formula for the heat semigroup associated to a generalized Laplacian operator acting on sections of a vector bundle over a noncompact manifold with a (possibly noncompact) boundary under mixed boundary conditions. We discuss geometric applications of the formula including: i) a new obstruction to the existence of metrics with positive isotropic curvature and 2-convex boundary on compact manifolds; ii) a conservation property for the heat semigroup associated to a class of generalized Dirac Laplacians which extends previous results by Vesentini and Masamune in the setting of differential forms.*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche e Naturali