## SEMINARIO DE ANÁLISIS Y APLICACIONES

Martes, 19 de septiembre de 2017

12:00 h., Aula Gris 1 (ICMAT)

## Zihui Zhao

University of Washington

Absolute continuity of elliptic measure and geometric properties of the domain

## Resumen:

Given a domain  $\Omega$ , people have been interested in studying the relationship between the harmonic measure  $\omega$ , the probability characterizing where a Brownian traveller is likely to exit the domain, and the surface measure  $\sigma$  of its boundary. Numerous study shows that if  $\omega$  is absolute continuous with respect to  $\sigma$ , qualitatively or quantitatively, we can deduce  $\Omega$  satisfies some nice geometric properties. Less is known about the elliptic measure, an analogous notation of harmonic measure for non-homogeneous Brownian travellers. In this talk I will present a recent result in this direction for the elliptic measure. This is joint work with Tatiana Toro.

ICMAT CSIC-UAM-UC3M-UCM Departamento de Matemáticas. U.A.M.