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.