

SEMINARIO DE ANÁLISIS Y APLICACIONES

Lunes 16 de enero,

11:30 h., Módulo 17 - Aula 520 (Depto. Matemáticas UAM)

Dimitris Vardakis

MSU

The Favard length decay of random Cantor sets

Resumen:

The Favard length of the planar $1/4$ -corner Cantor set is 0. Estimates exist about the rate with which the Favard length of the previous steps goes to 0, but the exact rate of decay is unknown. However, if one considers a random construction of the $1/4$ -corner Cantor set, things might seem better. In fact, Peres and Solomyak showed that the rate of decay for the average Favard length for the random $1/4$ -corner Cantor set is of order exactly $1/n$. We show that the rate of decay for a random disk-like analogue has again order $1/n$. This suggests that any “reasonable” random Cantor set of positive and finite length might decay at the same rate.

ICMAT CSIC-UAM-UC3M-UCM

Departamento de Matemáticas. U.A.M.

Proyecto CEX2019-000904-S financiado por MCIN/ AEI/10.13039/501100011033.

