

# XXIX MEMORIAL RUBIO DE FRANCIA

Viernes, 9 de junio de 2017

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

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Hausdorff dimension, Kakeya problems  
and projections

**Resumen:**

A Kakeya (or Besicovitch) set is a set of Lebesgue measure zero in a Euclidean space containing a unit line segment in all directions. The Kakeya conjecture asks whether these must have full Hausdorff dimension. This is known in the plane and open in higher dimensions. It is related to many questions of modern Fourier analysis. In the talk I shall discuss its relations to questions how Hausdorff dimension is transformed under projections.

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