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SEMINARIO SISTEMAS DINÁMICOS DE SANTIAGO

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TÍTULO *The Shrinking Target Problem for Self-Affine Sets*
IDIOMA Inglés

RESUMEN The shrinking target problem involves a dynamical system on a probability space or metric space and the set of starting points of orbits which hit a set of shrinking (defined in a suitable sense) sets infinitely often. Typical questions, depending on the setting, are to try and obtain a 0-1 law for the measure of the set based on the rate the targets shrink and to investigate the Hausdorff dimension of the set. We look at the dimension problem in the case of self-affine sets in R^2. By considering a toy model we will show the situation is very different to the 1-dimensional case. The family we consider relates to Bernoulli convolutions and our arguments use both the traditional methods of studying Bernoulli convolutions (transversality) and the more recent ideas of Hochman and Shmerkin. This is joint work with Henna Koivusalo.

DÍA / HORA Lunes 19 de agosto, 2024 / 16:30 - 17:30
LUGAR Sala 2, Facultad de Matemáticas, Pontificia Universidad Católica