

Title: The shrinking target problem for certain self-affine sets.

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Abstract: For a dynamical system you can consider the starting points of orbits which hit a set of shrinking targets infinitely often. This set is usually known as the shrinking target set. You can study whether the set has zero or full measure for some suitable invariant measure and in appropriate setting you can consider the Hausdorff dimension of the set. For conformal systems in \mathbb{R}^d these problems are fairly well understood but as usual much less is known in the non-conformal setting. We consider a special class of self-affine sets on the plane and make use of both transversality and recent work by Shmerkin on the L^q spectra of self-similar measures to find the dimension of the shrinking target sets. We will also highlight differences with the self-similar and conformal cases. This is joint work with Henna Koivusalo.