

**ON THE GEOMETRIC STRUCTURE OF THE LIMIT
SET OF CONFORMAL ITERATED FUNCTION
SYSTEMS**

ANTTI KÄENMÄKI

Abstract

We consider infinite conformal function systems on \mathbb{R}^d . We study the geometric structure of the limit set of such systems. Suppose this limit set intersects some l -dimensional C^1 -submanifold with positive Hausdorff t -dimensional measure, where $0 < l < d$ and t is the Hausdorff dimension of the limit set. We then show that the closure of the limit set belongs to some l -dimensional affine subspace or geometric sphere whenever d exceeds 2 and analytic curve if d equals 2.

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