

**ON THE ANALYTIC CAPACITY AND
CURVATURE OF SOME CANTOR SETS WITH
NON- σ -FINITE LENGTH**

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Abstract

We show that if a Cantor set E as considered by Garnett in [G2] has positive Hausdorff h -measure for a non-decreasing function h satisfying $\int_0^1 r^{-3} h(r)^2 dr < \infty$, then the analytic capacity of E is positive. Our tool will be the Menger three-point curvature and Melnikov's identity relating it to the Cauchy kernel. We shall also prove some related more general results.
