

1092-35-115

Murat Akman, John L Lewis and Andrew L Vogel* (alvogel@syr.edu), Mathematics Department, 215 Carnegie, Syracuse, NY 13244. *Hausdorff dimension and σ finiteness of p -harmonic measures in space when $p \geq n$.*

In this paper we study a measure, $\hat{\mu}$, associated with a positive p harmonic function \hat{u} defined in an open set $O \subset \mathbb{R}^n$ and vanishing on a portion Γ of ∂O . If $p > n$ we show $\hat{\mu}$ is concentrated on a set of σ finite H^{n-1} measure while if $p = n$ the same conclusion holds provided Γ is uniformly fat in the sense of n capacity. (Received August 05, 2013)