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David R Adams* (dave@ms.uky.edu), Mathematics Department, 715 Patterson Office Tower, University of Kentucky, Lexington, KY 40506. *A Frostman type characterization of Hausdorff-Netrusov Measures.*

Using the medium of Besov capacity, the capacities associated with the Besov spaces $B_\alpha^{p,1}$ and $B_\alpha^{1,q}$, $1 \leq p < \infty$, $1 \leq q < \infty$, we give a Frostman type characterization of Hausdorff-Netrusov measure:

$$\lim_{\epsilon \rightarrow 0} \inf \left[\sum_{i=1}^{\infty} \left(\sum_{j \in I_i} r_j^d \right)^\theta \right]^{1/\theta} \equiv H^{d,\theta}(E),$$

E compact subset of \mathbb{R}^N , $I_i = \{j : 2^{-i-1} \leq r_j < 2^{-i}\}$, $r_j \leq \epsilon$, $0 < \theta < \infty$, $0 < d \leq N$; the infimum is over all countable covers of E by balls of radius r_j , $j = 1, 2, \dots$. Frostman's result is: Classical Hausdorff d -measure $H^{d,1}(E) > 0$ iff there exists a measure μ supported on E such that $\mu(B(x,t)) \leq At^d$, $0 < t \leq 1$, and all $x \in E$. $B(x,t)$ is a Euclidean ball centered at x of radius $t > 0$; A is some constant independent of x and t . (Received December 10, 2009)