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Björn Bennowitz, , Iceland, **John L Lewis**, Lexington, KY, **Kaj Nyström**, Umea, Sweden, and **Andrew L Vogel*** (alvogel@syr.edu), Syracuse, NY. *Estimates for the dimension of p -harmonic measure in \mathbb{R}^n* . Preliminary report.

For a positive solution u to the p -Laplace equation in a domain $\Omega \subset \mathbb{R}^n$ and vanishing on the boundary of Ω we associate a measure μ . For $p \geq n \geq 3$ and Ω a δ -Reifenberg flat domain for $\delta(p, n)$ small enough, the measure μ is concentrated on a set of σ -finite Hausdorff $n - 1$ measure. For $1 < p < n$ the situation is more interesting as some examples involving Wolff snowflakes demonstrate. The results here are similar to those obtained in \mathbb{R}^2 by Lewis, Nyström, Poggi-Corradini for Jordan domains bounded by quasicircles and simply connected domains. (Received September 21, 2010)