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A Note on Harmonic Measure

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Abstract. Let Ω be a subregion of $\{z : |z| < 1\}$ for which the Dirichlet problem is solvable, assume that $0 \in \Omega$ and let ω_Ω denote harmonic measure on $\partial\Omega$ for evaluation at 0. If E is a Borel subset of $\{z : |z| = 1\}$ and $\omega_\Omega(E) > 0$, then we find a simply connected region G , where $0 \in G \subseteq \{z : |z| < 1\}$, $\partial G \subseteq \Omega \cup E$ and $\omega_G(E) > 0$, such that $U := G \cup \Omega$ has the property that ω_U and ω_Ω are boundedly equivalent on ∂U . We mention consequences of this in function theory.

Keywords. Harmonic measure, Green's potential.

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