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Level sets of Almgren's frequency and the size of critical sets of harmonic functions

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Almgren's frequency function is a versatile tool in studying elliptic PDEs which captures local growth information of a solution and is somewhat analogous to the "degree of a polynomial" in the setting of elliptic equations. I will survey some results on frequency and its applications in bounding the size of the critical set of harmonic functions, focusing on understanding the level sets of the frequency in the two-dimensional case but with an eye toward some of the additional difficulties that arise in higher dimensions.