

# $p$ -Harmonic functions in Euclidean space and in the Heisenberg group

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## Abstract

We will discuss several notions of weak solutions of the  $p$ -Laplace equation, including the case  $p = \infty$ , in  $\mathbb{R}^n$  and in the Heisenberg group  $\mathcal{H}$ . Bieske's extension of two uniqueness theorems of R. Jensen to the Heisenberg group will be presented. Finally, we will address the regularity of  $p$ -harmonic functions in the Heisenberg group, including Cordes estimates recently developed in collaboration with András Domokos.