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.