Meeting: 1000, Albuquerque, New Mexico, SS 12A, Special Session on Regularity in PDEs and Harmonic Analysis

Thomas J. Bieske* (tbieske@math.usf.edu), Dept. of Mathematics, 4202 E. Fowler Ave., PHY 114, Tampa, FL 33620. Equivalence of Solutions to the p-Laplace Equation in the Heisenberg Group.

In this talk, we prove a comparison principle for viscosity solutions to the p-Laplace equation in the Heisenberg group. As a consequence, we obtain the equivalence of potential theoretic harmonic functions, weak solutions and viscosity solutions to the p-Laplace equation. (Received August 23, 2004)