

Meeting: 1004, Bowling Green, Kentucky, SS 12A, Special Session on Partial Differential Equations and Their Applications

1004-35-170 **Luca Capogna*** (lcapogna@uark.edu), Dept. of Mathematics, University of Arkansas, Fayetteville, AR 72701. *Some regularity properties of convex functions in Carnot groups*. Preliminary report.

In a joint project with Diego Maldonado (University of Kansas) we have showed how the so-called engulfing property for convex functions in a Carnot group implies smoothness of the function itself. (Received January 24, 2005)