Meeting: 1000, Albuquerque, New Mexico, SS 13A, Special Session on Analysis and Geometry in Carnot-Caratheodory Spaces

1000-49-109 Francesco Serra Cassano* (cassano@science.unitn.it), Department of Mathematics, via Sommarive,14, Povo di Trento, 38050 Italy. Intrinsic graphs and minimal surfaces in the Heisenberg group. Preliminary report.

I will speak of a recent result obtained together with L. Ambrosio and D. Vittone of the Scuola Normale Superiore of Pisa (Italy). It is a new characterization of a notion of intrinsic regular graph in the Heisenberg group equipped with its Carnot-Caratheodory metric. This notion was originally introduced for the study of the rectifiability in this setting. Moreover this characterization will be applied to the study of non parametric minimal surfaces in intrinsic sense. (Received August 20, 2004)