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

1000-53-103 **Daniel R Cole*** (daniel.r.cole@dartmouth.edu), 6188 Bradley Hall, Dartmouth College, Hanover, NH 03755. $C^{1,1}$ *Hypersurfaces of the Heisenberg Group are* N*-Rectifiable.* Preliminary report.

A subset E of a Carnot group M is countably N-rectifiable if, up to Hausdorff measure, it is the countable union of Lipschitz images of a subgroup N of another Carnot group. In this talk, we prove that $C^{1,1}$ hypersurfaces of the three dimensional Heisenberg Group $\mathbb{H}$ are N-rectifiable, where N is a subgroup of of co-dimension one. In this context, N-rectifiability retains much of the flavor of Euclidean rectifiability in that N-rectifiable sets look locally like their tangent approximations. (Received August 19, 2004)