$\mathbf{T}_{\text{EMPLE}} \; \mathbf{U}_{\text{NIVERSITY}} \; \mathbf{M}_{\text{ATHEMATICS}} \; \mathbf{C}_{\text{OLLOQUIUM}}$ 

## Ermanno Lanconelli

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will speak on

## Liouville theorems for real sub-Laplacians on stratified Lie groups. Some applications to gauge functions, Eikonal equations and Bocher's theorems

ABSTRACT: We present some polynomial Liouville theorems for sub-Laplacians on stratified Lie groups. We then use these theorems to analyze some features of the gauge functions, i.e., the homogeneuos functions harmonic out of the origin. We also analyze the relationship between gauge functions, Eikonal equations and Bocher-type theorem.

> Monday, November 13, 2006 Lecture at 4:00 PM (\$) Coffee, tea, and refreshments from 3-5 PM. Room 617, Wachman Building Department of Mathematics