Colloquium

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: Enrico Le Donne
ETH

Monday, October 25, 2010
4:00 PM
117 Hayes-Healy Hall

Title: Embeddings and non-embeddings of the subRiemannian Heisenberg group: old and new results

Abstract:

This talk addresses the embedding problem for a particular example: the Heisenberg group equipped with the Carnot-Carath\'eodory distance. Such a metric space will be introduced and some of its properties will be mentioned. There will be a summary of previous results: existence or non-existence of embeddings for some classes of maps and some targets. Then some new results will be presented, e.g., the subRiemannian Heisenberg group can be embedded into R4 preserving the length of all the curves.