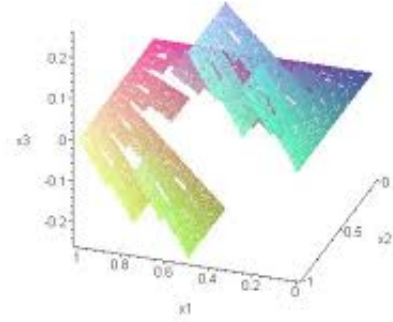


**Oberseminar Geometrie**  
Department of Mathematics  
University of Fribourg  
**Physics 2.52**  
Wednesday November 3, 10:20



DANIELA DI DONATO (SISSA)

### **$C^1$ -submanifolds and Lipschitz graphs in Carnot groups**

In Euclidean spaces, rectifiable sets are defined as being essentially contained in the countable union of  $C^1$ -submanifolds or, equivalently, of Lipschitz graphs. Hence, in Carnot groups, the corresponding notions of  $C^1_H$ -regular surfaces and intrinsic Lipschitz graphs are important to develop a satisfactory theory of intrinsic rectifiable sets. Firstly, I present their definitions and some basic properties and then I give a characterization of  $C^1_H$ -regular surfaces. The talk is based on a joint work with Antonelli, Don and Le Donne.