1147-51-690   **Daniele Semola*** (`daniele.semola@sns.it`). *Regularity of Lagrangian flows and lower Ricci curvature bounds.*

The aim of this talk, based on joint works with Elia Bruè, is to present a technique to study the regularity of flows drifted by Sobolev vector fields on spaces satisfying lower Ricci curvature bounds. The main novelty of our approach is the use of the Green function of the Laplacian as a replacement for the distance function. The results we present have applications in the study of the structure theory of these spaces, in particular in the non smooth framework. (Received January 28, 2019)