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Nicola Garofalo* (rembrandt54@gmail.com). *Volume and distance comparison theorems for sub-Riemannian manifolds*. Preliminary report.

In this talk I will discuss global distance estimates and uniform local volume estimates in a large class of sub-Riemannian manifolds. The main tools are the generalized curvature dimension inequality introduced by F. Baudoin and the speaker, and its systematic use in obtaining sharp inequalities for solutions of the sub-Riemannian heat equation. As a consequence, we obtain a Gromov type precompactness theorem for the class of sub-Riemannian manifolds whose generalized Ricci curvature is bounded from below. The results presented in this talk are joint with F. Baudoin, M. Bonnefont and I. H. Munive. (Received February 11, 2014)