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Riemannian approximation of subriemannian PDE Giovanna Citti

University of Bologna E-mail:**giovanna.citti@unibo.it**

Abstract

A subelliptic equation can be naturally considered as the limit of a Riemannian equation, when the smallest eigenvalue called ϵ goes to 0. We prove here stability of fundamental solution for linear PDE as ϵ , go to 0 and deduce regularity for motion by curvature in Carnot groups of step 2. The result has been obtained in collaboration with L. Capogna and M.Manfredini.