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Luca Capogna* (lcapogna@uark.edu), Department of Mathematics, SCEN 301, 1 University of Arkansas, Fayetteville, AR 72701. *Intrinsic regularity of sub-Riemannian minimal surfaces in the first Heisenberg group.*

I will describe recent work joint with C. Citti and M. Manfredini (U. Bologna, Italy). We study the regularity of a class of sub-Riemannian minimal surfaces in the first Heisenberg group, arising as limits of Riemannian minimal surfaces as the metrics collapse. We prove such objects are foliated by legendrian lifts of quadrics. We also prove some regularity across the foliation. (Received August 30, 2008)