

1020-28-263

Jeremy T Tyson* (tyson@math.uiuc.edu), 1409 W Green Street, Urbana, IL 61801. *Dimension comparison and distortion in sub-Riemannian geometry*. Preliminary report.

We present some elements of the intrinsic metric geometry of Carnot groups and other sub-Riemannian spaces, in particular: Gromov's dimension comparison problem (sub-Riemannian vs. Riemannian), dimension distortion by quasiconformal maps and conformal dimension, and dimensions of weakly regular graphs and surfaces. (Received August 29, 2006)