

Cornell University Library

We gratefully acknowledge support from the Simons Foundation and member institutions

Search or Article-id

(Help | Advanced search) arXiv.org > math > arXiv:1205.0228 All papers Go! Ŧ Mathematics > Metric Geometry Download: PDF Some properties of Hölder PostScript Other formats surfaces in the Heisenberg group Current browse context: math.MG Enrico Le Donne, Roger Züst < prev | next > new | recent | 1205 (Submitted on 1 May 2012) Change to browse by: It is a folk conjecture that for alpha > 1/2 there is no alpha-Hoelder surface in math the subRiemannian Heisenberg group. Namely, it is expected that there is no math.DG embedding from an open subset of R<sup>2</sup> into the Heisenberg group that is math.GT Hoelder continuous of order strictly greater than 1/2. The Heisenberg group here is equipped with its Carnot-Caratheodory distance. We show that, in the **References & Citations** case that such a surface exists, it cannot be of essential bounded variation NASA ADS and it intersects some vertical line in at least a topological Cantor set. Bookmark(what is this?) 📃 💿 🗶 🔜 🖬 💼 🚽 🔛 👳 Comments: 18 pages, 1 figure Subjects: Metric Geometry (math.MG); Differential Geometry (math.DG); Geometric Topology (math.GT) MSC classes: 53C17, 49Q15, 28A75, 26A16 Cite as: arXiv:1205.0228 [math.MG]

(or arXiv:1205.0228v1 [math.MG] for this version)

## Submission history

From: Enrico Le Donne [view email] [v1] Tue, 1 May 2012 18:34:50 GMT (22kb)

Which authors of this paper are endorsers?

Link back to: arXiv, form interface, contact.