

Addendum to: Barilari, Davide; Rizzi, Luca. Sub-Riemannian interpolation inequalities. *Invent. Math.* 215 (2019), no. 3, 977–1038 (cf. the latest arXiv version <https://arxiv.org/abs/1705.05380v6>)

The formulation of the open questions in Section 4.1, page 18, should be clarified. The idea at the basis of these open questions is that the presence of abnormal geodesics should be related with *any* type of loss of local semiconcavity at a point, and not only the one appearing in the definition at page 17 (the negation of which does not imply local semiconcavity). Analogously for loss of semiconvexity and loss of optimality. Therefore, for a formulation of the open questions corresponding to this idea, one should:

1. Redefine the sets $\text{SC}^\pm(x)$ at page 18 as follows:

$$\text{SC}^-(x) := \{y \in M \mid d_x^2 \text{ is not semiconcave in any neighborhood of } y\},$$

$$\text{SC}^+(x) := \{y \in M \mid d_x^2 \text{ is not semiconvex in any neighborhood of } y\}.$$

Notice that these sets are closed. Notice also that the inclusion $\text{Abn}(x) \supseteq \text{SC}^-(x)$, mentioned at page 18, is true only with this redefinition of $\text{SC}^-(x)$.

2. As a consequence, the open question (28) should be correctly stated as

$$\overline{\text{CutOpt}(x)} = \text{SC}^+(x), \tag{28'}$$

the overline standing for the closure. The idea is that, if d_x^2 is locally semiconvex in a neighborhood U of y , then all minimizing geodesics from x to points in U should be extendable without losing the minimality property.

We thank Hong-Quan Li and Ye Zhang for several remarks that allowed us to clarify our manuscript with this addendum.