## On the Moebius deformable hypersurfaces

**Ruy Tojeiro**<sup>1</sup>, M. I. Jiménez<sup>2</sup>

 $^1$  ICMC-USP

In the article [Deformations of hypersurfaces preserving the Möbius metric and a reduction theorem, Adv. Math. 256 (2014), 156–205], Li, Ma and Wang investigated the interesting class of Moebius deformable hypersurfaces, that is, the umbilic-free Euclidean hypersurfaces  $f: M^n \to \mathbb{R}^{n+1}$  that admit non-trivial deformations preserving the Moebius metric. The classification of Moebius deformable hypersurfaces of dimension  $n \ge 4$  stated in the aforementioned article, however, misses a large class of examples. In this talk we report on a recent joint work with M. I. Jimenez, in which we complete that classification for  $n \ge 5$ .

(This work was partially supported by Fapesp grant 2016/23746-6)