

Rigidity of Steiner's inequality for the anisotropic perimeter

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Abstract. The aim of this work is to study the rigidity problem for Steiner's inequality for the anisotropic perimeter, that is, the situation in which the only extremals of the inequality are vertical translations of the Steiner symmetral that we are considering. Our main contribution consists in giving conditions under which rigidity in the anisotropic setting is equivalent to rigidity in the Euclidean setting. Such conditions are given in term of a restriction to the possible values of the normal vectors to the boundary of the Steiner symmetral (see Corollary 1.17, and Corollary 1.18).

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