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The Relative Isoperimetric Inequality: the Anisotropic Case

We prove a relative isoperimetric inequality in the plane, when the perimeter is defined with respect to a convex, positively homogeneous function of degree one $H: \mathbb{R}^2 \rightarrow [0, +\infty[$. Under suitable assumptions on Ω and H , we also characterize the minimizers.

Keywords: Anisotropic perimeter, relative isoperimetric inequalities, Wulff shape.

MSC: 52A40