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The closed ball cannot be a minimizer of the perturbed perimeter
by a regular potential

Communication Info

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Abstract

We consider the minimization shape problem of a functional energy defined by the sum of the classical perimeter with a competing potential of regular kernel which is maximized by the ball. On the class of measurable subsets of the m -Euclidian space which are of finite perimeter and have a fixed volume v , we show that the ball of volume v cannot be a minimizer of such shape functionals.

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