Stability estimates for certain Faber-Krahn, isocapacitary and Cheeger inequalities

NICOLA FUSCO, FRANCESCO MAGGI AND ALDO PRATELLI

Abstract. The first eigenvalue of the p-Laplacian on an open set of given measure attains its minimum value if and only if the set is a ball. We provide a quantitative version of this statement by an argument that can be easily adapted to treat also certain isocapacitary and Cheeger inequalities.