On the Euler-Lagrange equation of a functional by Pólya and Szegö

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Abstract: I will talk about a conjecture of Pólya and Szegö on minimal electrostatic capacity sets in convex shape optimization. The functional, associated to the conjecture, involves capacity and perimeter. We will focus on the regularity properties of generalized solutions of the corresponding Euler-Lagrange equation. This is joint work with Nicola Fusco.