

1137-49-249

**Eric Baer\*** (ebaer@math.wisc.edu) and **Alessio Figalli**. *Characterization of isoperimetric sets inside almost-convex cones.*

We discuss a recent result showing that a characterization of isoperimetric sets (that is, sets minimizing a relative perimeter functional with respect to a fixed volume constraint) inside convex cones as sections of balls centered at the origin (originally due to P.L. Lions and F. Pacella) remains valid for a class of "almost-convex" cones. Key tools include compactness arguments and the use of classically known sharp characterizations of lower bounds for the first nonzero Neumann eigenvalue associated to (geodesically) convex domains in the hemisphere. (Received February 05, 2018)