1077-49-224 Frank Morgan* (Frank.Morgan@williams.edu) and Aldo Pratelli. Existence of isoperimetric regions in \mathbb{R}^n with density.

We prove the existence of isoperimetric regions in \mathbb{R}^n with density under various hypotheses on the growth of the density. Along the way we prove results on the boundedness of isoperimetric regions. (Received August 15, 2011)