

1137-49-329

**Enrique G Alvarado\*** (ealvarado9611@gmail.com), 435 NE Howard Street, #B, Pullman, WA 99163, and **Kevin R Vixie**. *A Lower Bound for the Reach of a Flat-Norm Minimizer.*

Given a closed curve in the plane that is given to us by the boundary of a set with finite perimeter, there is a smoothed out version of the curve that is given to us by applying the multi-scale flat norm to the curve; the scale being  $\lambda$ . We show how we can get a lower bound (depending on  $\lambda$ ) on the reach of such a smoothed out object. (Received February 06, 2018)