Mohammad Ghomi* (ghomi@math.gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332, and Jaigyoung Choe and Manuel Ritore. Relative isoperimetric inequality outside convex bodies.

We prove that the area of a hypersurface which traps a given volume outside of a convex body in Euclidean n-space must be greater than or equal to the area of a hemisphere trapping the given volume on one side of a hyperplane. (Received September 20, 2005)