

A sharp bound for the area of minimal surfaces in the unit ball, to appear in Geometric and Functional Analysis

Let  $\Sigma$  be a  $k$ -dimensional minimal surface in the unit ball  $B^n$  which meets the boundary  $\partial B^n$  orthogonally. We show that the area of  $\Sigma$  is bounded from below by the volume of the unit ball in  $\mathbb{R}^k$ .