

MONICA TORRES

University of Texas at Austin

Plane-like minimal surfaces in periodic media

We consider \mathbb{R}^n as a periodic media with inclusions (heterogeneous media). We measure the area of a surface by neglecting the parts inside the inclusions. We prove that given any plane in \mathbb{R}^n , we can find at least one minimal surface that always stays at a bounded distance (universal) from the plane. This minimal surface is the boundary of a class A minimizer. We analyze the behavior of our minimal surface in the homogenized limit, as the size of the period goes to zero, for the case $n = 2$.