

1092-35-199

William M Feldman* (wfeldman10@math.ucla.edu). *Homogenization of Oscillating Dirichlet Boundary Condition in General Domains.*

We will discuss some issues in the homogenization elliptic problems with periodically oscillating Dirichlet boundary data. In half spaces the problem homogenizes when the normal direction is not aligned with any direction from the periodicity lattice of the boundary data. For general domains we will explain how the problem homogenizes despite the lack of averaging at the boundary points with bad normal directions. This essentially amounts to showing a comparison principle for sub and supersolutions ordered only on a sufficiently large subset of the boundary. (Received August 09, 2013)