

Homogenization in Perforated domains

Prof. Doina Cioranescu
Universite de Paris VI, France.

Abstract:

We present here the method of periodic unfolding in perforated domains. The main feature of this method is the fact that functions defined on perforated domains are extended on fixed domains. To do that, no extension operators are needed and so, one can treat domains with complex geometries. In particular, the holes can cut the boundary of the domain. Consequently, we could answer some open questions related to this situation.