* Electronic Address: angela.stevens@wwu.de
† Electronic Address: b.jost@uni-muenster.de
[1] Applied Mathematics Münster, University of Münster

Homogenization of weakly connected structures in 2D: Combining stripes, traps, and sieves

Angela Stevens[1*], Benedikt Jost[1†]

In this talk the heat equation with homogeneous Neumann boundary conditions on a two-dimensional weakly connected structure made of stripes, traps, and sieves is homogenized. In the limit two one-dimensional equations arise, which are coupled via a memory term in the bulk and a possible concentration gap at the boundary.