

Abstract

A crashcourse in Homogenization Methods and Multiscale Modelling: Formal Asymptotics (Part 1)

This minicourse wants to provide a quick and elementary introduction to the main issues of the theory of mathematical homogenization. My aim is twofold:

(1) I want to underline the main mathematical problems arising when dealing with (partial) differential equations with oscillating coefficients and then give a glimpse on a possible way on how to handle them rigorously.

(2) With a view on real life applications