ANALYSIS SEMINAR

TWO-SCALE CONVERGENCE AND APPLICATIONS IN HOMOGENIZATION

Aida Timofte

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF MISSISSIPPI

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Abstract : *The two-scale convergence is a very efficient homogenization method for partial differential equations with periodically oscillating coefficients. We introduce the notions of weak/strong two–scale convergence, periodic unfolding/folding operators, and discuss some related results. We also point out their applications in the homogenization of evolutionary variational inequalities and in the homogenization of a ferroelectric material model.*