

Simultaneous Dimensional Reduction and Homogenization in Manifold Valued Functions Spaces

Elvira Zappale

Department of Basic and Applied Science, Sapienze -University of Rome, Rome, Italy
ELVIRA.ZAPPALE@UNIROMA1.IT

Abstract

Both dimensional reduction and homogenization is rigorously obtained for integral functionals defined on the manifold constrained Orlicz-Sobolev and BV spaces. The achieved results find application in the study of equilibria for liquid crystals, in ferromagnetism or for magnetostrictive materials where the physical quantities take their values into a given manifold.

References

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