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## DETECTION OF SCALES OF HETEROGENEITY AND PARABOLIC HOMOGENIZATION APPLYING VERY WEAK MULTISCALE CONVERGENCE

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ABSTRACT. We apply a new version of multiscale convergence named very weak multiscale convergence to find possible frequencies of oscillation in an unknown coefficient of a partial differential equation from its solution. We also use this notion to study homogenization of a certain linear parabolic problem with multiple spatial and temporal scales.

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