## L'homogénéisation de probleme des ondes pour structures réticulées renforcées vers l'épaisseur du matériau. Contrôlabilité exacte pour structures réticulées renforcées.

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## Abstract

Our main interest in this work is three-dimensional reticulated reinfoirced structures that are characterized by two properties periodicity and small thickness of the material. Such structures that consist of identical cells periodically distributed in all directions (reticulated) where  $\varepsilon$ -period and the material is concentrated along bars of thickness  $\varepsilon\delta$ .

For such structures, we treat waves problem in the case  $\delta \to 0$ . Homogenization of reticulated reinforced structures for  $\varepsilon \to 0$  can also be found in the [2].

In a second step, an exact internal control  $v_{\varepsilon\delta}$  is built by the HUM method introduced by J.L. Lions.

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