
MACROSCOPIC AND MICROSCOPIC BEHAVIOUR OF THE SOLUTIONS OF
A TRANSMISSION PROBLEM FOR THE HELMHOLTZ EQUATION IN A
DOMAIN WITH A SMALL INCLUSION.

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Joint work with Tuğba Akyel.

We consider a transmission problem for the Helmholtz equation in a domain with a small inclusion of size $\epsilon > 0$ and we analyze the macroscopic and microscopic behavior of the solutions, *i.e.*, the behavior of the solutions and of the rescaled solutions, as $\epsilon > 0$ tends to zero by an approach that is alternative to that of asymptotic expansions.

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