

## THE FRIEDRICHS–WIRTINGER TYPE INEQUALITY AND ITS APPLICATION TO THE TRANSMISSION PROBLEM IN A CONICAL DOMAIN

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*Abstract.* We formulate the new Friedrichs–Wirtinger type inequality with the sharp constant and apply it to the investigation of the behavior of weak solutions to the transmission problem for linear elliptic divergence second order equations in a neighborhood of the boundary conical point. We establish the precise rate of decreasing of the solution.

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