NON-CLASSICAL ASYMPTOTIC EXPANSIONS FOR EIGENVALUE PROBLEMS WITH A PARAMETER IN THE BOUNDARY CONDITION

B. Bandyrski, I. Gavrilyuk, V. Makarov, I. Makarov

University "Lvivska politechnika"
S. Bandery Str., 79002 Lviv, Ukraine
Berufsakademie Thüringen, Staatliche Studienakademie
Am Wartenberg 2, 99817 Eisenach, Germany
Institute of Mathematics
National Academy of Sciences
3 Tereshchenkivska Str., 01601 Kyiv, Ukraine
Institute of Cybernetics
National Academy of Sciences
40 Glushkova Str., 03680 Kyiv, Ukraine

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Abstract

The aim of this work is to obtain exponentially convergent asymptotic expansions for eigenvalues and eigenfunctions of an eigenvalue problem containing the eigenvalue parameter in the boundary condition. Such eigenvalue problems are used when solving sloshing problems by analytical-numerical methods.

Key words and phrases: asymptotic expansion, boundary eigenvalue parameter, sloshing analysis.

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