
ANALYSIS OF A GENERALIZED ROBIN–STEKLOV EIGENVALUE PROBLEM WITH THE (p, q) -LAPLACIAN

Burlacu(Iordachianu) ANDREEA-LAURA^{1,*},

¹*Doctoral School of Mathematics, Ovidius University of Constanta, Romania*

ABSTRACT

In this paper, we investigate an eigenvalue problem driven by the (p, q) -Laplacian, involving positive potentials and parametric boundary conditions. By employing the Nehari manifold method along with variational techniques, we prove the existence of a nontrivial open interval $I \subseteq \mathbb{R}$ such that every $\lambda \in I$ is an eigenvalue of the problem.

Keywords Eigenvalues · (p, q) -Laplacian · parametric boundary condition · Nehari manifold

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*Corresponding Author's E-mail: andreea.laura.burlacu@365.univ-ovidius.ro