

PERTURBED EIGENVALUE PROBLEMS

by

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ABSTRACT. We study perturbed eigenvalue problems in which the differential operator involved is  $-\Delta u - \operatorname{div}(|\nabla u|^{p-2}\nabla u)$  with  $p \in (1, \infty) \setminus \{2\}$ . The problems will be analyzed both in bounded and unbounded domains. We will consider either homogeneous Dirichlet boundary conditions or homogeneous Neumann boundary conditions. The proofs are based on adequate variational methods. This is a joint work with Maria Fărcașeanu and Mihai Mihăilescu.