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Rajan Puri*, Wake Forest University, and **Boris Vainberg**. *On critical value of the coupling constant in exterior elliptic problems.*

We consider exterior elliptic problems with coefficients stabilizing at infinity and study the critical value β_{cr} of the coupling constant (the coefficient at the potential) that separates operators with a discrete spectrum and those without it. The dependence of β_{cr} on the boundary condition and on the distance between the boundary and the support of the potential is described. The discrete spectrum of a non-symmetric operator with the FKW boundary condition (that appears in diffusion processes with traps) is also investigated. (Received September 04, 2019)