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Leonid Friedlander* (friedlan@math.arizona.edu), Department of Mathematics, University of Arizona, Tucson, AZ 85721. *Asymptotics of the Steklov eigenvalues.*

Let Ω be a bounded planar domain with a smooth boundary Γ . We consider the following problem: $(-\Delta + \mu^2)u = 0$ in Ω ; $(\partial u / \partial \mathbf{n})u = \nu u$ on Γ . Here \mathbf{n} is the outward unit normal vector to Γ , μ is a parameter, and ν is the spectral parameter, Let $\nu_k(\mu)$ be the k -th eigenvalue of the problem. We derive asymptotics of $\nu_k(\mu)$ as $\mu \rightarrow \infty$. (Received February 05, 2014)