

Название публикации:

The Sturm-Liouville problem with singular potential and the extrema of the first eigenvalue

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Аннотация:

We get the infima and suprema of the first eigenvalue of the problem

$-y'' + qy = \lambda(y),$

$\{y'(0) - k(0)y(0) = 0,$

$y'(1) + k(1)y(1) = 0,$

where q belongs to the set of constant-sign summable functions on $[0,1]$ such that $\int_0^1 q(x) dx = 1$ or $\int_0^1 q(x) dx = -1$.

Ключевые слова:

Sturm-Liouville problem; eigenvalue; Dirac delta function