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ON BASISNESS OF EIGEN- FUNCTIONS OF DISCONTINUOUS SECOND
ORDER DIFFERENTIAL OPERATOR

Abstract

In paper the spectral on finite segment problem for discontinuous second order differential operator with alternating high coefficient and with discontinuous boundary conditions is considered. A class of regular boundary conditions is selected and for regular boundary problems the asymptotic of eigenvalues and Green- function has been got, the basis properties of eigen- and associated functions in the space $L_p, 1 < p < \infty$ have been studied.