

ON DEPENDENCE OF EQUICONVERGENCE
RATE ON THE MODULE OF CONTINUITY OF
COEFFICIENT $P_2(x)$ OF A FOURTH ORDER
DIFFERENTIAL OPERATOR

Abstract

In this paper differential operator of the fourth order

$$Lu = u^{(4)} + P_2(x) u^{(2)} + P_3(x) u^{(1)} + P_4(x) u$$

with summable complex-valued coefficients $P_l(x)$, $l = \overline{2,4}$ on the interval $G = (0, 1)$ is considered.

Rate of uniform equiconvergence of biorthogonal expansion of functions from $L_p(G)$, $p \geq 1$, with their trigonometric series is investigated.