

THE BINARY ANALOGUE OF WIENER'S TAUBERIAN THEOREM AND
CLOSELY RELATED QUESTIONS

Abstract

In the paper the binary analogue of Wiener N. Tauberian theorem is formulated. Besides, criteria for the density in the spaces $L(\mathbf{R}_+)$ (or $L^2(\mathbf{R}_+)$) of the linear span of the set of all binary shifts of the given function $f \in L(\mathbf{R}_+)$ (or $f \in L^2(\mathbf{R}_+)$) are cited. Analogous criteria are given for the functions $f \in L[0,1)$ or $f \in L^2[0,1)$.