ON ALMOST UNIFORM CONVERGENCE
AND THE FIRST CLASS BAIRE FUNCTIONS

In this paper we will research some type of convergence, so-called almost uniform convergence, of functional sequences \((f_n)_{n=1}^{\infty}\) of real valued functions \(f_n\) defined on a topological space \(X\). This kind of convergence is between strong quasi-uniform convergence (for details see [17]) and pointwise one. We will formulate sufficient and necessary conditions when a sequence \((f_n)_{n=1}^{\infty}\) is almost uniform convergent on a compact topological spaces. We also prove that the limit of almost uniform convergent sequence of functions of the first Baire class on a \(\sigma\)-compact and \(G_\delta\) space \(X\) is a function of the first Baire class as well.

References


