ISOMORPHIC STRUCTURE OF THE ORLICZ-LORENTZ SEQUENCE SPACES

ANNA KAMIŃSKA

Given a positive weight sequence $w = (w(n))$ and an Orlicz function φ, increasing and continuous (not necessarily convex), we define the Orlicz-Lorentz sequence space $d(w, \varphi)$. It becomes a quasi-normed space if the lower Matuszewska-Orlicz index of φ is positive, i.e. $\alpha(\varphi) > 0$ as well as the upper index of $W(n) = \sum_{i=1}^{n} w(i)$ is finite, i.e. $\beta(W) < \infty$. We present among others necessary and sufficient conditions when the space $d(w, \varphi)$ contains an isomorphic copies of ℓ_p, $0 < p \leq \infty$ and c_0. It is a joint work with Yves Raynaud.