ON THE SYMMETRIZATION OF QUASI-BANACH SPACES OF MEASURABLE FUNCTIONS

YVES RAYNAUD
INSTITUT DE MATHMATIQUES DE JUSSIEU (FRANCIA)

Abstract. Given a quasi-Banach ideal lattice E of measurable functions on $\mathbb{N}$ or on $(0, a)$ $(0 < a < \infty)$ consider its symmetrization, i.e., the set $E^{(*)}$ consisting of measurable functions with decreasing rearrangement in E. Under reasonable hypotheses, $E^{(*)}$ is also a quasi-Banach lattice, with quasi-norm $\|f\| = \|f^*\|_E$. We are interested in determining some structural features of $E^{(*)}$ in terms of those of E; in particular we determine which are the l_p spaces which embed isomorphically, or lattice-isomorphically in $E^{(*)}$, in terms of the cone of positive decreasing functions in E.