Properties of the sequence group $\ell^1(G)$

Abstract

For an abelian topological group G we consider the group of absolutely summing sequences

$$\ell^1(G) = \{(x_n) \in G^{\mathbb{N}} : \sum_{n \in \mathbb{N}} \kappa_U(x_n) < \infty \; \forall \; U \in \mathcal{N}_G(0)\}$$

where κ_U generalized the Minskowski functional for groups. In this talk we are going to study some properties of the topological space $\ell^1(G)$ and some duality properties, in particular, we show that $\ell^1(G)$ is a Pontryagin reflexive group in case G is an LCA group.