

Title: Orlicz spaces on hypergroups

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For a locally compact hypergroup K and a Young function φ , we study the Orlicz space $L^\varphi(K)$ and provide a sufficient condition for $L^\varphi(K)$ to be an algebra under convolution of functions. We show that a closed subspace of $L^\varphi(K)$ is a left ideal if and only if it is left translation invariant. We apply the basic theory developed here to characterize the space of multipliers of the Morse–Transue space $M^\varphi(K)$. We also investigate the multipliers of $L^\varphi(\mathcal{S}, \pi_K)$, where $\mathcal{S}$ is the support of the Plancherel measure π_K associated to a commutative hypergroup K .

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