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Inductive limit topologies on Orlicz spaces

Abstract: Let L^φ be an Orlicz space defined by a convex Orlicz function φ and let E^φ be the space of finite elements in L^φ (= the ideal of all elements of order continuous norm). We show that the usual norm topology $\mathcal{T}_\varphi$ on L^φ restricted to E^φ can be obtained as an inductive limit topology with respect to some family of other Orlicz spaces. As an application we obtain a characterization of continuity of linear operators defined on E^φ.