

Perturbation Method in Orlicz Sequence Spaces

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We develop a new perturbation method in Orlicz sequence spaces ℓ_M with Orlicz function M satisfying Δ_2 condition at zero. This result allows one to support from below any bounded below lower semicontinuous function with bounded support, with a perturbation of the defining function σ_M .

We give few examples how the method can be used for determining the type of the smoothness of certain Orlicz spaces.

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