SOME GEOMETRIC PROPERTIES OF MUSIELAK–ORLICZ SEQUENCE SPACES GENERATED BY DE LA VALLÉE–POUSSIN MEANS

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Abstract. Necessary and sufficient conditions for the non-triviality of a Musielak-Orlicz sequence space $V_{\Phi}(\lambda)$ generated by the de la Vallée-Poussin means are obtained. Topological properties such as completeness, separability, order continuity are characterized for the space $V_{\Phi}(\lambda)$. Finally, criteria for the coordinatewise uniformly Kadec-Klee property and the Uniform Opial property are obtained.


Keywords and phrases: Musielak-Orlicz function, de la Vallée-Poussin means, Amemiya norm, Luxemburg norm, Fatou property, order continuity, coordinatewise Kadec-Klee property, uniform Opial property.

REFERENCES


