

Alberto Fiorenza, Miroslav Krbeč
Indices of Orlicz spaces and some applications

Comment.Math.Univ.Carolinae 38,3 (1997) 433-451.

Abstract: We study connections between the Boyd indices in Orlicz spaces and the growth conditions frequently met in various applications, for instance, in the regularity theory of variational integrals with non-standard growth. We develop a truncation method for computation of the indices and we also give characterizations of them in terms of the growth exponents and of the Jensen means. Applications concern variational integrals and extrapolation of integral operators.

Keywords: Boyd indices, Orlicz spaces, Simonenko indices, non-standard growth conditions, variational integrals, interpolation, extrapolation

AMS Subject Classification: Primary 46E30; Secondary 26A12, 35A15, 35B10, 42B20, 46E35