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An inequality in Orlicz function spaces with Orlicz norm

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Abstract: We use Simonenko quantitative indices of an $\mathcal{N}$-function Φ to estimate two parameters q_Φ and Q_Φ in Orlicz function spaces $L^\Phi[0,\infty)$ with Orlicz norm, and get the following inequality: $\frac{B_\Phi}{B_\Phi-1} \le q_\Phi \le Q_\Phi \le \frac{A_\Phi}{A_\phi-1}$, where A_Φ and B_Φ are Simonenko indices. A similar inequality is obtained in $L^\Phi[0,1]$ with Orlicz norm.

Keywords: Orlicz spaces, Simonenko indices, $\triangle_2$-condition
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