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Title: Extension of the best polynomial approximation operator in Musielak–Orlicz spaces

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In this paper, we considered the best polynomial approximation operator defined in the so-called Musielak–Orlicz space. Namely, we investigated the existence and uniqueness of the best polynomial approximation in Musielak–Orlicz space L^{Φ} . We extended the best polynomial approximation operator from L^{Φ} to L^{φ} , where $\varphi(x,t) = \Phi'_{t+}(x,t)$. In addition, we established some properties of the extended best polynomial approximation operator.

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