

1154-41-2457

**Vladyslav Babenko\***, Department of Mathematical Analysis, Oles Honchar Dnipro National University, Dnipro, 49000, Ukraine, **Vira Babenko**, Department of Mathematics and Computer Scienc, Drake University, Des Moines, IA 50311, and **Oleg Kovalenko**, Department of Mathematical Analysis, Oles Honchar Dnipro National University, 49000, Ukraine.

*Korneichuk-Stechkin lemma and Ostrovskii type inequalities for functions with values in L-spaces.*

Korneichuk-Stechkin lemma plays an important role in solving many extremal problems of Approximation Theory. We will present a generalization of this lemma to the case of functions with values in L-spaces (semilinear isotropic metric spaces) and discuss various applications of the generalization. In particular, we will present a new sharp Ostrovskii type inequalities for functions with values in L-spaces. (Received September 17, 2019)