

AN OSTROWSKI TYPE INEQUALITY FOR A  
RANDOM VARIABLE WHOSE PROBABILITY  
DENSITY FUNCTION BELONGS TO  $L_p[a, b], p > 1$

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*Abstract.* An inequality of Ostrowski's type for a random variable whose probability density function is in  $L_p[a, b], p > 1$ , in terms of the cumulative distribution function and expectation is given. An application for a Beta random variable is also given.

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*Key words and phrases:* Ostrowski's type inequalities, probability density functions, cumulative distribution functions, expectations, beta random variable.

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