

**ON SOLUTIONS TO THE EQUATION
FOR IMPROVING ADDITIVES
IN REGRESSION PROBLEMS***Yu. Yu. Linke and A. I. Sakhanenko*

In this article, we consider the problem of finding a solution to a functional equation which in a special way depends on the distribution of a random variable. Such equations naturally arise in construction of consistent estimates in regression problems in the case when the variances of the main observations depend on underlying unknown parameter and the regression coefficients are determined with random errors. A simple example of a regression problem is demonstrated when the equation under consideration occurs.

Key words and phrases: functional equation, regression, errors in independent variables, dependence of variances on parameter, two-step estimation.

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