

## Large Adaptive Estimation in Linear Regression Model Part 1. Consistency

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*Abstract:* Condition of identifiability of linear regression model with symmetric distribution of errors is given. Following Beran's approach for location case consistency and asymptotic normality of this adaptive estimator is proved. The result shows that the estimator is not asymptotically efficient. But it selects model with such distribution function of errors which is (in the sense of Hellinger distance applied on  $F(x)$  and  $1 - F(-x)$ ) "as much as possible symmetric" which may be useful when we know that there are no reasons for the asymmetry.

*Keywords:*

*AMS Subject Classification:*