

**ROBUSTNESS OF ESTIMATION
OF FIRST-ORDER AUTOREGRESSIVE MODEL
UNDER CONTAMINATED UNIFORM WHITE NOISE**

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Abstract

The first-order autoregressive model with uniform innovations is considered. In this paper, we study the bias-robustness and MSE-robustness of modified maximum likelihood estimator of parameter of the model against departures from distribution of white noise. We used the generalized Beta distribution to describe these departures.

Keywords: autoregressive model, bias, MSE, robustness, generalized Beta distribution.

2000 Mathematics Subject Classification: 62F11, 62M10.

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Received 17 March 2009

Revised 19 August 2009