



# On localization of source by hidden Gaussian processes with small noise

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## Abstract

We consider the problem of identification of the position of some source by observations of  $K$  detectors receiving signals from this source. The time of arriving of the signal to the  $k$ -th detector depends of the distance between this detector and the source. The signals are observed in the presence of small Gaussian noise. The properties of the MLE and Bayesian estimators are studied in the asymptotic of small noise.

**Keywords** Partially observed linear system · Parameter estimation · Hidden process · Small noise · MLE · BE

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