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Optimal Sequential Multiple Hypothesis Tests

Andrey Novikov

Abstract: This work deals with a general problem of testing multiple hypotheses about the distribution of a discrete-time stochastic process. Both the Bayesian and the conditional settings are considered. The structure of optimal sequential tests is characterized.

Keywords: sequential analysis; hypothesis testing; multiple hypotheses; discrete-time stochastic process; dependent observations; optimal sequential test; Bayes sequential test;

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