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Let us consider m -dimensional vector of the discrete time Markov processes. The transition probabilities of each coordinate changes at some moment. There are p -such moments, $p \leq m$. The aim is to estimate some number (satisfactory number) of these moments on line based on the observation of the processes. The satisfactory number of changes is defined by some simple game. The Bayes approach is applied.

The estimation of disorders is transformed to a multivariate, multiple optimal stopping problem. The approach proposed by Kurano, Yasuda and Nakagami [1], extended to markovian sequences by Szajowski and Yasuda [2] with fundamental modification of performance criterion. It leads to construction of estimation algorithm. The results is generalization of the research presented in [3].

Keywords *voting stopping rule, majority voting rule, monotone voting strategy, change-point problems, quickest detection, sequential detection, simple game, false alarm, overestimation, risk*

References:

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