

METHOD OF FAULT DETECTION AND DIAGNOSIS IN LINEAR STOCHASTIC SYSTEMS IN THE PROCESS OF FILTRATION

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A computationally efficient method of fault detection and its identification in the class of linear stochastic control systems in the process of filtration has been obtained. The efficiency of the method lies in the fact that a decision is taken on a limited set of likelihood function values, the values being computed directly in terms of values generated by the filter.

Linear stochastic systems, fault detection, Kalman filter, likelihood function, sequential analysis.

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