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WITH THE DISTRIBUTED TIME DELAY 2

A.M. Tsykunov

The problem of robust control with reference model for object under external disturbances, with distributed time delay, and unknown parameters of mathematical model is solved. The algorithm of control that allows compensating the prior uncertainty of parameters and external bounded disturbances with required accuracy is derived. The numerical example and results of modeling are presented.

Keywords: robust control, state vector, disturbance, distributed time delay.

INVESTIGATION OF OPTIMAL CONTROL PROBLEM
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V.A. Kubyshkin, S.S. Postnov

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Keywords: optimal control, moment problem, integrator, fractional derivative, fractional integral.

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Yu.S. Legovich, D.Yu. Maximov

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Keywords: graph transformations, many-valued logic, mobile ad-hoc nets, net-centric control systems, self-organizing systems, decision making.

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E.N. Shomova

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Keywords: structural data analysis, time series analysis algorithms, univariate time series.

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E.A. Burlakov

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Keywords: crisis, crisis management, weak signals, mathematical modeling, simulation, agent-based modeling.

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L.Yu. Zhilyakova

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Keyword: resource network, control, stochastic matrix, stocks, inhomogeneous Markov chain.

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G.G. Grebenyuk, A.A. Krygin, S.M. Nikishov

Now decision-making process the connection of consumers to power networks is one of the most painful problems — both for consumers of electric energy, and power enterprises and organizations. The choice of a point of accession of a consumer to a power network has many versions of decision, each of which demands knowledge of technology of transfer and energy distribution in networks, characteristics of the network equipment and some other questions. The paper proposes the system approach, allowing to accelerate and automate decision-making process regarding technical possibility of technological connections of consumers' power receivers to distributive electric networks.

Keywords: electricity, technical accession, choice algorithms.

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E.A. Larina, A.M. Sidorenko, E.N. Khobotov

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Keywords: scheduling theory, control, planning, aggregation of information, assembling, engineering products, production program.

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