

Application of a markov process as a method of modeling the development process from the perspective of the situational approach

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Abstract

This article describes a new approach to the problem of nonlinear systems development in terms of situational paradigm, the role played by Synergetics in describing nonlinear processes. Predictable for small periods of time and unpredictable for larger period's behavior is typical for many objects that are studied by economics, psychology and sociology. Not an exception is the discovery of chaos in deterministic systems. The philosophical solution of such complex and difficult task, as the creation of a holistic multi-dimensional theoretical image of rapidly changing, developing world, obviously, can be obtained with the help of a universal and powerful method of research, as is the situational approach. It is shown the possibility of using Markov process as a method of modeling the development of complex open systems described by statistical laws that have multi-valued, probabilistic relation.

Keywords

Chaotic Behavior, Deterministic Objects, Markov Process, Non-Linear Science, Open Systems, Probabilistic Communication, Self-Organizing Systems, Statistical Laws, Stochastic Objects, Synergetics Situational Approach