

Peculiarities of the theory of stochastic orbit correction in planning project ballistic support of interplanetary missions

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The article shows that in contrast to the algorithms of ballistic and navigation support of operational Mission Control tasks, which are based on the use of deterministic models, ballistic and navigation support of design phase should be based on stochastic models and research, which includes the use of stochastic approaches, such as the method of statistical tests.

Different energy criteria are considered as a criterion for the quality of the correction, such as the expectation of the total energy costs, quantiles of the level of characteristic speed to the correction, the probability of finding the energy consumption within the limits.

The article shows the ways of the synthesis of ballistic and navigation support of interplanetary flight.

Keywords: *ballistic and navigation support, orbit correction, correction methods, stochastic correction, interplanetary flights, correction accuracy.*

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