

Synthesis of underwater vehicle stabilization system based on probabilistic and asymptotic methods

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Abstract: The application of probabilistic and asymptotic methods of forecasting in the synthesis problems for regular navigation and for the critical operation modes. These two modes are matched by a Sugeno fuzzy regulator.

Keywords: probabilistic and asymptotic method of fuzzy regulator, Sugeno forecast

Bibliography:

Wentzell AD, Freidlin MI Fluctuations in dynamical systems under the influence of small random perturbations, Nauka, 1979, p. 424.

Kruglov VV, Fuzzy logic and neural networks, Nauka, 2002, p. 221.

Dubovik SA, The algorithm of critical state forecast of a dynamic system. - Dynamical Systems, 1998, vol. 14, p. 40 - 44.

Dubovik SA, Nechaev Yu.I. Alexandrov VL and others, The algorithm of the functional action, Intellectual systems in marine research and technology, Publishing House. SPbSMTU Center, St. Petersburg, 2001, p. 138 - 143, p. 395.

Mandzuka S., Mathematical Model of a Submarine Dynamics at the Periscope Depth. Proceedings of International Symposium: Waves. - Brodogradnja, 36, 1998, 5 - 6.