METHODS OF SHIP HANDLING IN AVOIDANCE BY THE FUZZY LOGIC CONTROL

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ABSTRACT

In this paper, the author presents the methods of ship handling in avoidance by the fuzzy logic control. The goal of the presented system is to support the navigator in decision making, with possible full replacement of his work in the future. Introduced system has to assure safe trip of ship in each navigational conditions with regard of weather conditions and met navigational objects of static or dynamic nature. The paper devotes the regulators for ship control as: Logic-linguistic regulators, Analytical regulators, Trained Fuzzy Regulators, Comparative Analysis of Fuzzy Controllers, Synthesized by the Methods of Fuzzy Logic and Probability Theory.

Keywords: Logic-linguistic regulators, Analytical regulators, Trained Fuzzy Regulators, Comparative Analysis of Fuzzy Controllers.