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EXISTENCE OF THE VALUE AND SADDLE POINT IN POSITIONAL DIFFERENTIAL GAMES FOR NEUTRAL-TYPE SYSTEMS

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For a conflict-controlled dynamical system described by functional differential equations of neutral type in Hale's form, we consider a differential game with a quality index that estimates the motion history realized up to the terminal time and includes an integral estimation of realizations of the players' controls. The game is formalized in the class of pure positional strategies. The main result is a proof of the existence of the value and saddle point in this game.

Keywords: neutral type systems, control theory, differential games.

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