

Pursuit and evasion differential games in Hilbert Space

ABSTRACT

We consider pursuit and evasion differential game problems described by an infinite system of differential equations with countably many Pursuers in Hilbert space. Integral constraints are imposed on the controls of players. In this paper an attempt has been made to solve an evasion problem under the condition that the total resource of the Pursuers is less than that of the Evader and a pursuit problem when the total resource of the Pursuers greater than that of the Evader. The strategy of the Evader is constructed

Keyword: Differential game; Pursuit; Strategy; Evasion