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## ON A PROBLEM OF PURSUING A GROUP OF EVADERS IN TIME SCALES

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A problem of pursuing a group of evaders by a group of pursuers with equal capabilities for all the participants is considered in a finite-dimensional Euclidean space  $\mathbb{R}^k$ . In a given time scale  $T$ , the problem is described by a system

$$z_i^\Delta = u_i - v,$$

where  $f^\Delta$  is the  $\Delta$ -derivative of  $f$  in the time scale  $T$ . The set of admissible controls is a ball of unit radius centered at the origin. The terminal sets are the origin. In addition, it is assumed that all the evaders use the same control and, during the game, stay within a convex polyhedral set with nonempty interior. Sufficient conditions are obtained for the solvability of the problem of capturing at least one evader. The method of resolving functions is used as a basis of this research.

Keywords: differential game, pursuer, evader, group pursuit, time scale.

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