

**MULTIPLE CAPTURE IN PONTRYAGIN'S RECURSIVE EXAMPLE WITH
PHASE CONSTRAINTS**

Received February 10, 2015

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We consider Pontryagin's generalized nonstationary example with identical dynamic and inertial capabilities of the players and state constraints on the evader's states. The boundary of the phase constraints is not a "death line" for the evader. The set of admissible controls is a ball centered at the origin, and the terminal sets are the origin. We obtain sufficient conditions for a multiple capture of one evader by a group of pursuers in the case when some functions corresponding to the initial data and parameters of the game are recursive.

Keywords: pursuer, evader, phase restrictions, Pontryagin's example, group pursuit.

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Cite this article as:

N.N. Petrov, N. A. Solov'eva. Multiple capture in Pontryagin's recursive example with phase constraints, *Trudy Inst. Mat. Mekh. UrO RAN*, 2015, vol. 21, no. 2, pp. 178–186.