

A MOVING OBJECT AND OBSERVERS IN \mathbb{R}^2 WITH PIECEWISE SMOOTH SHADING SET**V. I. Berdyshev**

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We consider the motion of an object t in the space \mathbb{R}^2 , where a bodily bounded bounded set G with piecewise smooth boundary hinders the motion and visibility. In a neighborhood of convex parts of the boundary, there are observers, which can hide from t in a shade set $s(t) \subset \mathbb{R}^2 \setminus G$ in the case of danger from t . We find characteristic properties of the trajectory \mathcal{T} of the object that maximizes the value $\min\{\rho(t, s(t)) : t \in \mathcal{T}\}$.

Keywords: navigation, escort problem, moving object, observer.

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