

**AN OBJECT MOVING IN \mathbb{R}^2 WITH A HIGH-SPEED DESTRUCTIVE
MINIOBJECT AND AN UNFRIENDLY SOLID OBSERVER****V. I. Berdyshev**

We propose a model for the motion in a given corridor $Y \subset \mathbb{R}^2$ of an object t equipped with a high-speed destructive minioobject in the presence of a solid unfriendly observer f . In $\mathbb{R}^2 \setminus Y$ there is a subset G that obstructs visibility and motion. For safety reasons, the observer sticks to neighborhoods of the angles and convex fragments of the boundary of G . The trajectory of t is a curve $\mathcal{T} \subset Y$ with a given speed regime v_t of the motion along it. The possibilities for the observer to track the object in a safe mode and for the object to avoid the observation depend on the positions of the observer and the object. We characterize the positions in which, for any \mathcal{T} , the object can choose a regime v_t enabling the avoidance of observation and the positions guaranteeing that the observer can see a part of the trajectory.

Keywords: navigation, trajectory, observer, moving object.

MSC: 00A05

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