

Responses to reviewer comments and paper rejection

Two of the reviewers are satisfied with the revisions. The remaining one reviewer raised four concerns about the paper. However, we believe that all four concerns are non-issues, as these concerns are already addressed in our paper.

We would like to ask that our paper be reconsidered for acceptance. We would be happy to clarify these three concerns to clear up any misunderstanding, especially concern 4 and perhaps concern 2. Please see our response to the concerns below.

Concern 1:

The reviewer claims that we do not provide a way for the defender to intercept the attacker.

Response:

In Section VI-C, we clearly provide a control strategy for the defender that guarantees the interception of the attacker in the last paragraph before Algorithm 1: The defender's strategy that guarantees interception of the attacker is to first go to p^* , then capture the level set image, and finally track the captured level set image.

Concern 2:

The reviewer claims that our approach does not involve collaboration against a set of attackers.

Response:

The collaboration is inherent in the maximum matching process (Section V), in which defenders agree on which attacker each of them will defend.

Concern 3:

The reviewer states that the path defense method does not address the problem from the attackers' perspective.

Response:

The path defense method's primary focus is on defending, not on attacking. It provides winning region in conservative towards one direction, the defender.

Concern 4:

The reviewer asks whether we must assume that the number of attackers and the number of defenders are equal.

Response:

Though we formulated the problem as an N vs. N game, a bipartite graph can always be constructed in the way we described regardless of the number of attackers and defenders. Once the bipartite graph is constructed, a maximum matching can be found, again regardless of the number of attackers and defenders.