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Extracted Annotations (2022-01-10)

> "This paper presents a method for deriving optimal controls and assigning attacker-defender pairs in a targetattacker-defender differential game between an arbitrary numbers of attackers and defenders, all of which are modeled using double integrator dynamics." (Coon and Panagou 2017:1496)

> "It is assumed that each player has perfect information about the states and controls of the players within a certain range of themselves, but they are unaware of any players outside of this range." (Coon and Panagou 2017:1496)

Assumptions (note on p.1496)

> "In [4], the optimal controls for each player in a single-attacker-single-defender game are derived using constrained optimization" (Coon and Panagou 2017:1496)

> "and the critical speed above which the target can always escape is determined analytically." (Coon and Panagou 2017:1496)

> "In this method, a solution is determined for each possible attacker-defender pair, then a maximum matching algorithm is used to assign pairings that prevent the maximum number of attackers from reaching their target." (Coon and Panagou 2017:1496)

> "In [27], the authors use a decentralized control scheme based on a Voronoi partition of a game involving one evader and multiple pursuers in a plane." (Coon and Panagou 2017:1496)

> "here we consider double integrator dynamics for the agents. The double integrator model is a better representation for multi-copter aircraft compared to the Dubins model, since it captures the aircraft's ability to change direction quickly without making wide turns. 1" (Coon and Panagou 2017:1497)