

Group Chase and Escape

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We describe here a new concept of one group chasing another, called "group chase and escape", by presenting a simple model. We will show that even a simple model can demonstrate rather rich and complex behavior. In particular, there are cases in which an optimal number of chasers exists for a given number of escapees (or targets) to minimize the cost of catching all targets. We have also found an indication of self-organized spatial structures formed by both groups.

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