

[P11] Effect of the mobility on iterated prisoners' dilemma game with reputation-based-strategy

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Mobility is one of the realistic and effective mechanisms to explain the origin of cooperation in iterated prisoners dilemma game and another one is the reputation as a typical example of indirect reciprocity. Considering both the mechanisms, we introduce a reputation-based-strategy with adaptive movement in which players respond cooperatively (C) or defeatedly (D) depending on each opponent's reputation and then, after the game playing, each player chooses to move or not to move according to the game results. When one does not follow the adaptive move, each player always moves like random walker. On the other hand, each player attaches oneself to cooperative cluster with adaptive movement. In this study, we investigate the effect of the adaptive movement to the cooperative level of the system.