



The Kullback-Liebler Divergence as a Lyapunov Function for Incentive Based Game Dynamics

Dashiell E.A. Fryer

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It has been shown that the Kullback-Leibler divergence is a Lyapunov function for the replicator equations at evolutionary stable states, or ESS. In this paper we extend the result to a more general class of game dynamics. As a result, sufficient conditions can be given for the asymptotic stability of rest points for the entire class of incentive dynamics. The previous known results will be can be shown as corollaries to the main theorem.

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