

Evolutionary games on self-organizing populations

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I will discuss the evolutionary dynamics of populations in which individuals engage in games associated with popular social dilemmas. The dynamical structure of their social ties co-evolves with individual strategies, such that individuals differ in the rate at which they seek new interactions. Moreover, once a link between two individuals has formed, the productivity of this link is evaluated. Links can be broken off at different rates. Whenever the

active dynamics of links is sufficiently fast, population structure leads to a transformation of the payoff matrix of the original game. We explore the evolutionary dynamics of both one shot and repeated games, deriving analytical conditions for evolutionary stability.

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