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Adaptive dynamics for Prisoner's Dilemma

Adaptive dynamics is a method of determining the best way to alter the strategy of mutants in the population in order to maximise the profit. This mathematical apparatus can be applied in game theory to the repeated donation game, otherwise known as the prisoner's dilemma. In this talk, we are going to cover the construction of the payoff function for the prisoner's dilemma, its symmetries, the corresponding adaptive dynamics and some of their properties.