

9.S916, Fall 2016, Homework 1

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Disseminated 9 September 2016 – Due 15 September 2016

This homework assignment is ungraded, but I strongly encourage you to do it!

1 Problem 1

The x axis of Figure 2 of Rand & Nowak (2013) is called the "shadow of the future", defined as the quantity

$$w - (T + P - R - S)/(T - S)$$

where w is the probability that a given game between two agents in a population of prisoners dilemma players will be a rematch (as opposed to the first match between agents in that population), and T, P, R, S are explained in Box 1 of the paper. Derive this quantity from the information given in the paper.