

## **Rational Cooperation and Reputational Effects (With Ernesto Reuben and Sigrid Suetens)**

**Abstract:** In repeated prisoners' dilemmas with a known end, cooperation rates are well above zero. This result cannot be justified from the perspective of non-cooperative game theory based on the assumption that all individuals are payoff maximizers and this is common knowledge. However, a model that mildly relaxes these assumptions by relying on the existence of a small fraction of reciprocators in the population can be sufficient to rationalize cooperation (Kreps et al., 1982). Key is the assumption that individuals are uncertain about the type of their partner in the repeated interaction. The uncertainty introduces a correlation between past actions and beliefs about future actions, which gives rational maximizers an incentive to mimic reciprocators as long as there is scope for future interaction, and gives them a chance to update beliefs about the type of their partner in the course of the interaction. We design a laboratory experiment aimed at uncovering the behavioral relevance of the uncertainty assumption. We find that the presence of reciprocators and the assumption of uncertainty are crucial to explain behavior in our experiment, and provide evidence consistent with rational updating.