

The solution concept of "backwards induction" has been with mathematical game theory from the beginning. Its powerful method allows us to solve finite games, but it has come under attack, as human players rarely play according to the backwards induction strategies. "Rarely", but not "never". When reasoning about beliefs and intentions of others, we do employ backwards induction up to a certain depth. In particular, human beings do this quite efficiently. In this series of two talks, the first given by Benedikt Löwe, the second by Eric Pacuit, we shall introduce to a formal model of reasoning in games with changing and false beliefs that will allow us to ask precise empirical questions about human reasoning. In the first talk, we present the model; in the second talk, we tie it to the existing literature on rationality in games.