

## **Department of Economics – Neuroeconomics Seminar**

## May 9, 2019 - 17:00 - 18:00

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## Strategizing and attention in games

I will present the results of two related experimental studies (work in collaboration with Luca Polonio) in which we used eye-tracking to measure the dynamic patterns of visual information acquisition in games. In a first study, participants played one-shot two-player normal-form games in which either, neither, or only one of the players had a dominant strategy. Our method allowed us to predict whether the decision process would lead to equilibrium choices or not, and to attribute out-of-equilibrium responses to limited cognitive capacities or social motives. Our results suggest the existence of individually heterogeneous-but-stable patterns of visual information acquisition based on subjective levels of strategic sophistication and social preferences. In a second study we used eye-tracking technique to test whether players' actions are consistent with their expectations of their opponent's behavior. Participants played a series of two-player 3 by 3 one shot games and stated their beliefs about which actions they expect their counterpart to play (first-order beliefs) or about which actions their counterparts expect them to play (second-order beliefs). Using eye-tracking study we could identify a larger consistency between actions and stated beliefs compared with previous studies, and we could characterize the behavioral rules associated with choice-beliefs inconsistency. Implications for the theories of bounded rationality will be discussed.