

Department of Economics – Neuroeconomics Seminar

March 2nd, 2023-17:00 - 18:00

Dobromir Rahnev Georgia Tech

The computations underlying perceptual decision making

Perceptual decision making is the process of choosing a course of action based on the available sensory evidence. This process begins with the visual system's internal representation of the stimulus. A person makes a decision based on this representation and evaluates this decision via a confidence rating. Progress in perceptual decision making ultimately requires an understanding of the stimulus, the internal representation, the decision, and the confidence in the decision. This talk will focus on recent work that begins to reveal the computations that link all these components together. I will present recent work addressing the nature of the internal representation and explains several apparent decision biases and suboptimality. I will also discuss recent advances in understanding the computations behind confidence and argue that decision and confidence computations are performed on the same information by the same system. Finally, I will highlight exciting large-scale initiatives in visual metacognition that promise to transform this emerging field.