

Decision Processes Colloquia

Monday, April 9, 2018

Where: 340 JMHH

When: 12:00 – 1:20 pm

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Prospect Theory and Attention Allocation

ABSTRACT:

In the literature on decision making under risk, modeling analyses with cumulative prospect theory (CPT) have hardly been connected to work on predecisional information processing. I suggest that that key psychological constructs in CPT, such as loss aversion and outcome and probability sensitivity, can be interpreted in terms of attention allocation. In a process-tracing study (using MouselabWEB), I demonstrate specific links between CPT parameters and attentional regularities during predecisional information search. Specifically, individual differences in loss-aversion, outcome-sensitivity, and probability-sensitivity parameters (estimated from participants' choices) were associated with individual differences in patterns in attention allocation to outcome and probability information. Moreover, using computer simulations in which CPT was fitted to choices produced by various choice heuristics, I show that CPT's psychological constructs meaningfully reflect properties of the heuristics' attention allocation policies. The results highlight CPT's overlooked potential to serve as a measurement tool to track and characterize information processing underlying decisions under risk, as well as a framework for theory integration.