

Decision Processes Colloquia

Monday, March 13, 2023

Where: **260 JMHH**

When: **12:00 – 1:20 pm**

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Cognitive Imprecision and Stake – Dependent Risk Attitudes

ABSTRACT:

In an experiment that elicits subjects' willingness to pay (WTP) for the outcome of a lottery, we confirm the fourfold pattern of risk attitudes described by Kahneman and Tversky. In addition, we document a systematic effect of stake sizes on the magnitude and sign of the relative risk premium, holding fixed both the probability that a lottery pays off and the sign of its payoff (gain vs. loss). We further show that in our data, there is a log-linear relationship between the monetary payoff of the lottery and WTP, conditional on the probability of the payoff and its sign. We account quantitatively for this relationship, and the way in which it varies with both the probability and sign of the lottery payoff, in a model in which all departures from risk-neutral bidding are attributed to an optimal adaptation of bidding behavior to the presence of cognitive noise. Moreover, the cognitive noise required by our hypothesis is consistent with patterns of bias and variability in judgments about numerical magnitudes and probabilities that have been observed in other contexts.

