

Decision Processes Colloquia

Monday, March 3, 2025

Where: JMHH G50

When: 12:00 – 1:20 pm

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Context-Dependent Strategic Reasoning

ABSTRACT:

Strategic sophistication, the ability to reason iteratively about others' mental states and actions, is fundamental to many social interactions. While economic experiments using abstract games consistently show limited strategic sophistication, with individuals typically engaging in only one or two steps of iterative reasoning, casual observation as well as psychological research suggests people often demonstrate higher levels of strategic sophistication in the real world. We hypothesize that people engage in more sophisticated strategic thinking in naturalistic settings than in abstract games. We adapt an experimental paradigm that systematically varies participants' knowledge states (whether others know about a payoff, know about one's knowledge, and so on) and develop a novel measure for directly assessing strategic sophistication. We find that people consistently exhibit higher strategic sophistication in naturalistic settings. Furthermore, our results suggest that naturalistic contexts enhance strategic sophistication not by improving one's ability to track higher-order knowledge or by reducing confusion, but rather by cueing people to engage in perspective taking and strategic reasoning. This context-dependent strategic reasoning is outside the scope of existing behavioral game theory models and points us toward new theories of strategic decision making.

