

**TITLE:** Integrating Cognitive and Economic Decision Models

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**SESSION DESCRIPTION:** Historically, economic models of choice have assumed that consumers' choices maximize utility given their fixed preferences over alternatives and a budget constraint. In parallel, behavioral decision-theory has been questioning the accuracy and the usefulness of the economic perspective, based on experimental results that apparently defy an economic explanation. This seemingly intractable conflict between rational economic models and behavioral research on “heuristics and biases” characterized much of the research on economic decision-making.

However, emerging approaches suggest ways to bridge this gap, and develop new integrative theories that are able to account for departures from classical economic models and to identify the potentially rational bases of seeming behavioral anomalies. Researchers in cognitive psychology have conceptualized choice as the result of cognitive processes that evolve during deliberation. These models allow a person with 'deep' preferences to make choices that systematically diverge from standard economic models, as a function of what has been learned from the environment, and the degree of effort expended and the attention to attributes and alternatives.

Likewise, choice modeling in economics has recently taken a promising turn in a similar direction, explaining seeming anomalous findings by allowing for limited attention instead of adding ad-hoc parameters to standard models. A number of recent papers argue that biased conclusions arise from incorrectly assuming full attention to all attributes and alternatives [16, 21, 22]. Recent research in economics and marketing investigates departures from classical implications of utility maximization among a set of alternatives as a source of joint identification of preferences and (unobserved) attention, such as limited search due to search cost [1, 4, 5, 6]. However, the potentially strong underlying connections to cognitive models of choice remain to be uncovered [2, 9, 13].

We believe that these interdisciplinary advances can be leveraged to develop encompassing choice models, grounded in first principles about how people make decisions. Incorporating cognitive models of choice, which incorporate effort, attention and learning, with economic frameworks that may be more econometrically implementable, can enable new insights relevant to economics, psychology, marketing and policy. This session will explore how these new approaches, can help us understand risky choice [10, 11, 12, 14, 15, 19], intertemporal choice [3, 18], consumer product valuation and choice [7, 17] and financial decisions [8, 20]. By assembling a diverse group of researchers, across academic disciplines, who have made relevant advances in their respective areas, we hope to collectively make progress in this direction.

**ATTENDEES:**

Daniel Bartels (Behavioral Marketing, Chicago Booth)

Xinyu Cao (Quant Marketing, NYU)

Andrew Caplin (Economics, NYU)

Leandro Carvalho (Economics, USC)

Daniel Csaba (Economics, NYU)

Todd Gureckis (Psychology, NYU)

Arash Laghaie (Quant Marketing, Goethe University Frankfurt)

Ben Newell (Psychology, University of New South Wales)

Thomas Otter (Quant Marketing, Goethe University Frankfurt)

Tim Pleskac (Psychology, Kansas)

Nicholas Reinholz (Behavioral Marketing, U. Colorado Boulder)

Jennifer Trueblood (Psychology, Vanderbilt)

Oleg Urminsky (Behavioral Marketing, Chicago Booth)

Cathy Liu Yang (Quant Marketing, HEC Paris)

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