Society for NeuroEconomics
NEUROSCIENCE • PSYCHOLOGY • ECONOMICS

Annual Meeting Detailed Program

Friday October 6th

Welcome and Opening Remarks
08:30 – 08:45

Brian Knutson
Stanford University
President

Session I
08:45 – 10:20

Value and Choice Mechanisms

08:45 - 09:05
Neuronal adaptation and optimal coding in economic decisions
Camillo Padoa-Schioppa[1], Katherine Conen[1], Xinying Cai[2], Aldo Rustichini[3]
[1]Washington University in St Louis, [2]NYU Shanghai, [3]University of Minnesota

09:10 - 09:30
Value or a cognitive map? Comparing grid-like conceptual representations and subjective value signals during decision-making
Linda Yu[1], Sangil Lee[1], Joseph Kable[1]
[1]University of Pennsylvania

09:35 - 09:55
The neural correlates of (in)consistency
Vered Kurtz[1], Dotan Persitz[1], Dino Levy[1]
[1]Tel Aviv University

10:00 - 10:20
Budget effects on demand elasticities depend on anterior cingulate cortex in rat consumers
Tobias Kalenscher[1], Sandra Schäble[1], Marijn van Wingerden[1], Yue Hu[1]
[1]Heinrich Heine University Düsseldorf

Poster Spotlights I
10:25 – 10:50

10:25 - 10:30
Entropy of Value Representation, Information Maintenance, and the Exploration-Exploitation Tradeoff
Alexandre Dombrovski[1], Michael Hallquist[2]
[1]University of Pittsburgh, [2]Penn State University

10:30 - 10:35
Changing preferences: The neural basis of non-reinforced behavioral change
Rotem Botvinik Nezer[1], Tom Salomon[1], Yaniv Assaf[1], Tom Schonberg[1]
[1]Tel Aviv University

10:35 - 10:40
The evil of banality: When choosing between the mundane feels like choosing between the worst
Amitai Shenhav[1], Carolyn Dean Wolf[1], Uma Karmarkar[2]

[1]Brown University, [2]Harvard Business School, Harvard Center for Brain Sciences

10:40 - 10:45 **Dopaminergic modulation of the functional connectome and its effects on facial attractiveness judgment**

Gabriele Bellucci[1], Caroline Burrasch[1], Sabrina Strang[1], Thomas Münte[1], Soyoung Park[1]
[1]University of Lübeck

10:45 - 10:50 **Emotional cues alter value-based decision-making and information maintenance in borderline personality disorder: evidence from computational modeling and neuroimaging**

Michael Hallquist[1], Alexandre Dombrovski[2]
[1]Penn State University, [2]University of Pittsburgh

Poster Session I

10:50 – 13:15 Coffee/Tea and snacks served
Please visit our poster presenters in the Trinity Ballroom and Foyer.

13:15 – 14:15 **Buffet Lunch**

The Kavli Foundation Social and Decision Science Workshop

14:15 – 15:45 **New Approaches to Studying How Ideas and Behaviors Spread**
Emily Falk, University of Pennsylvania

15:45 – 16:05 **Coffee Break**

16:05 – 17:35 **Neuroeconomics in the field**
Johannes Haushofer, Princeton University and Busara Center for Behavioral Economics
While neuroeconomic research in lab settings affords experimental control and facilitates replicability, field settings are attractive to establish external validity and move neuroeconomic research beyond "WEIRD" populations. I will discuss the practicalities of conducting behavioral and pharmacological research in field settings, especially in developing countries.

Society for NeuroEconomics
Neuroscience • Psychology • Economics

The Kavli Foundation Neuroscience Workshop

14:15 – 15:45

Reproducibility in neuroimaging: Challenges and solutions
Russell Poldrack, Stanford University
It has become widely appreciated that common scientific practices can lead to inflated rates of false results, and many features of neuroimaging suggest that it may be particularly liable to these problems. My talk will discuss a number of the potential threats to reproducibility in neuroimaging research, including small sample sizes, analytic flexibility, and multiple comparisons. I will also discuss the particular challenges raised by increasingly powerful analysis methods such as machine learning techniques. For each of these challenges I will propose solutions that together have the potential to improve the reproducibility of neuroimaging results.

15:45 – 16:05

Coffee Break

16:05 – 17:35

Reproducible, generalizable brain models of affective processes
Tor Wager, University of Colorado at Boulder
Recent years have seen dramatic advancement in the measurement of biology at a systems level. Researchers routinely obtain thousands or millions of simultaneous measures of dynamic systems. In humans, this includes neuroimaging, which can be used to probe the brain bases of affect and emotion in increasingly sophisticated ways. Neuroimaging can provide measures of activity in 300,000 brain locations and 60 billion functional associations every second. However, the complexity of these measures presents new challenges in maintaining scientific transparency and reproducibility. In this talk, I describe several new models of the brain bases of affective processes, including models that predict the intensity of negative affect, autonomic responses, prosocial emotions, and pain. These models reduce complex neuroimaging data to measures that can be readily replicated and generalized across laboratories. They can be tested prospectively on new participants, providing unbiased estimates of effect size that are often dramatically larger than single regions from standard brain maps. By asking which stimuli and psychological states these measures respond to across studies, we can induce the nature of their associated psychological constructs, providing a foundation for understanding how affect and emotion are generated in the brain.

Networking Cocktail Reception

17:35 – 19:00
Foyer

Join us in the Foyer for appetizers, drinks and networking opportunities.

Society for NeuroEconomics
NEUROSCIENCE • PSYCHOLOGY • ECONOMICS

Saturday October 7th

Session II — Learning

08:45 – 10:20

08:45 - 09:05
Social information impairs reward learning in depressive patients
Lou Safra[1], Coralia Chevallier[2], Sarah-Jayne Blakemore[3], **Stefano Palminteri[2]**
[1]INSERM, Ecole Normale Superieure, [2]INSERM, Ecole Normale Superièure, [3]ICN, University College London

09:10 - 09:30
Neural and behavioral signatures of metacontrol in reinforcement learning
Wouter Kool[1], Samuel Gershman[1], Fiery Cushman[1]
[1]Harvard University

09:35 - 09:55
Beliefs about bad people are volatile
Jenifer Siegel[1], Christoph Mathys[2], Robb Rutledge[2], Molly Crockett[1]
[1]University of Oxford, [2]University College London

10:00 - 10:20
Information Prediction Errors in the Human Brain are Valence Dependent and underlie Selective Information Search
Caroline Charpentier[1], Ethan Bromberg-Martin[2], Tali Sharot[3]
[1]California Institute of Technology, [2]Columbia University, [3]University College London

Poster Spotlights II

10:25 – 10:50

10:25 - 10:30
Cooperative decision making in the prisoner's dilemma game across the lifespan
Maliheh Taheri[1], Ulrik Beierholm[2], Pia Rotshtein[1]
[1]University of Birmingham, [2]Durham University

10:30 - 10:35
The Habitization of Self-Control
Gökhan Aydogan[1], Jesse St. Amand[1], Ian Ballard[2], Samuel McClure[1]
[1]Arizona State University, [2]Stanford University

10:35 - 10:40
Adapting choice behavior and neural value coding in monkey orbitofrontal cortex
Jan Zimmermann[1], Paul Glimcher[1], Kenway Louie[1]
[1]New York University

10:40 - 10:45
How the sequence of interaction affects strategic choices and value encoding
Ming-Hung Weng[1], Jen-Tang Cheng[1]
[1]National Cheng Kung University

10:45 - 10:50
How bottom-up visual salience guides strategic choice in matching and hider-seeker games

Xiaomin Li[1], Ralph Adolphs[1], **Colin Camerer**[1]
[1]Caltech

Poster Session II

10:50 – 13:15

Coffee/Tea and snacks served
Please visit the poster presenters in the Foyer.

13:15 – 14:15 **Buffet Lunch**

Session III

14:15 – 15:25

Strategic Choice

14:15 - 14:35 **Neural computations of strategic decision-making in the volunteer's dilemma**
Seongmin Park[1], Jean-Claude Dreher[2]
[1]University of California, Davis, [2]CNRS

14:40 - 15:00 **Studying the neural trade-off between human social cooperation and competition through the time dilemma**
M. Andrea Pisauro[1], Elsa Fouragnan[2], Marios Philiastides[1]
[1]University of Glasgow, [2]University of Oxford

15:05 - 15:25 **Inferring Individual Goals Using Inverse Reinforcement Learning**
Kelsey McDonald[1], Shariq Iqbal[1], Scott Huettel[1], John Pearson[1]
[1]Duke University

Society for NeuroEconomics
Neuroscience • Psychology • Economics

The Fred Kavli Plenary Lecture

15:30 – 16:40

Narrative Economics and Neuroeconomics
Robert Shiller, Yale University
The human mind is highly tuned towards narratives or human-interest stories that can justify ongoing actions. The human brain, when confronted with the need to make economic decisions, does not simply maximize a stable utility function as hypothesized by much economic theory. This lecture considers the epidemiology of narratives relevant to economic outcomes, allowing them to "go viral" and spread far, even worldwide, thereby influencing economic outcomes. The 1920-21 Depression, the Great Depression starting in 1929, the so called "Great Recessions" of 1973-75, 1980-82, and 2007-9, the secular stagnation-inequality scare after 2008, and President Donald Trump's economic revolution, are considered in view of the popular narratives of their respective times. These examples are seen as revealing the importance of the linkage of human brains and now computers through narratives associated with popular models of the economy, and offering new research opportunities for both economics and neuroscience.

All Attendee Dinner

1800 – 20:00
The One Eighty Restaurant
55 Bloor Street West

A short 20-minute walk from the hotel, join us on the 51st Floor of the Manulife Centre to take in the spectacular sights of the city! An evening of food stations and passed hors d'oeuvres, along with good music and great views, will complete a busy second day of the meeting.

Sunday October 8th

Announcements

08:30 – 08:45

Brian Knutson
Join us for the Early Career Award presentations, the Society Board Election Results and other Society information.

Session IV

08:45 – 10:20

Social Preferences and Influences

08:45 - 09:05

Accounting for Taste: A Multi-Attribute Neurocomputational Model Explains Divergent Choices for Self and Others
John Clithero[1], Alison Harris[2], Cendri Hutcherson[3]
[1]Pomona College, [2]Claremont McKenna College, [3]University of Toronto

09:10 - 09:30

Gratitude and Pride: Neural correlates of reward attribution to others and oneself

Ke Ding[1], **Dian Anggraini**[2], Klaus Wunderlich[1]
[1]Ludwig-Maximilians-Universitaet, [2]Graduate School of Systemic Neuroscience, LMU

09:35 - 09:55 **Spatial gradient in activity within the insula reflects dissociable neural mechanisms underlying context-dependent advantageous and disadvantageous inequity aversion**
Xiaoxue Gao[1], Hongbo Yu[2], Ignacio Saez[3], Philip Blue[1], Lusha Zhu[1], Ming Hsu[2], Xiaolin Zhou[1]
[1]Peking University, [2]University of Oxford, [3]University of California

10:00 - 10:20 **Fronto-parietal coupling of brain rhythms during third-party punishment**
Oksana Zinchenko[1], Dmitriy Altukhov[1], Alexey Ossadtchi[1], Anna Shestakova[1], Vasily Klucharev[1]
[1]National Research University Higher School of Economics

Poster Spotlights III

10:25 – 10:50

10:25 - 10:30 **How brain rhythms code for variables of decision making: EEG motor beta oscillations reflect reward and risk level associated with an action**
Xingjie Chen[1], Meaghan McCarthy[1], Youngbin Kwak[1]
[1]UMass Amherst

10:30 - 10:35 **Risk Attitude as a Perceptual Bias**
Mel Khaw[1], Ziang Li[1], Michael Woodford[1]
[1]Columbia University

10:35 - 10:40 **Reconsidering the description-experience gap: Overweighting of rare events in experienced-based decision under risk**
Shu-Ching Lee[1], Shih-Wei Wu[2]
[1]National Yang-Ming University, Taiwan, [2]National Yang-Ming University

10:40 - 10:45 **Memory beliefs explain why decisions are biased by memory**
Sebastian Gluth[1], Tehilla Mechera-Ostrovsky[1]
[1]Department of Psychology, University of Basel

10:45 - 10:50 **Short-term plastic changes in the primary sensory cortex elicited by monetary outcomes**
Aleksei Gorin[1], Elena Krugliakova[2], Aleksandra Kuznetsova[1], Vasily Klucharev[1], Anna Shestakova[1]
[1]National Research University Higher School of Economics, [2]University Hospital Zürich

Poster Session III

10:50 – 13:15 Coffee/Tea and snacks served
Please visit our poster presenters in the Foyer.

13:15 – 14:15 **Buffet Lunch**

Society for NeuroEconomics
NEUROSCIENCE • PSYCHOLOGY • ECONOMICS

Session V — Risk & Finance

14:15 – 15:25

14:15 - 14:35
Can brain activity forecast stock prices?
Mirre Stallen[1], Nicholas Borg[2], Brian Knutson[2]
[1]Leiden University, [2]Stanford University

14:40 - 15:00
Risk-seeking and loss-seeking in non-human primates is due to convex utility functions and not probability distortion
Shiva Farashahi[1], Habiba Azab[2], Benjamin Hayden[2], **Alireza Soltani**[1]
[1]Dartmouth College, [2]University of Rochester

15:05 - 15:25
Eyes on the prize: risk-promoting sensory reward features result in pupil dynamics consistent with a shift in locus coeruleus-mediated control states
Mariya Cherkasova[1], Jason Barton[1], Luke Clark[1], A. Jon Stoessl[1], Catharine Winstanley[1]
[1]University of British Columbia

Session VI — Self-Control and Temporal Discounting

15:30 – 17:05

15:30 - 15:50
White matter predicts mobile phone use and impulsive decision making
William Hampton[1], Henry Wilmer[1], Ingrid Olson[1], Thomas Olino[1], Jason Chein[1]
[1]Temple University

15:55 - 16:15
Neuroanatomy in the vmPFC and dlPFC predicts individual differences in self-control ability of dietary decision-making across tasks
Liane Schmidt[1], Anita Tusche[2], Nicolas Manoharan[1], Cendri Hutcherson[3], Todd Hare[4], Hilke Plassmann[1]
[1]INSEAD, [2]Computational and Neural Systems California Institute of Technology, [3]University of Toronto, [4]University of Zurich

16:20 - 16:40
A multiplicative increase in subjective valuation underlies both food and drug craving
Anna Konova[1], Silvia Lopez-Guzman[1], John Messinger[1], Kenway Louie[1], Paul Glimcher[1]
[1]New York University

16:45 - 17:05
Amount and time exert independent influences on intertemporal choice
Dianna Amasino[1], Nicolette Sullivan[1], Rachel Kranton[1], Scott Huettel[1]
[1]Duke University