

## Full Schedule

### Sunday, April 6<sup>th</sup>

3:00 pm      Check-in

5:30 pm      Reception

6:30 pm      Dinner

#### **7:30 pm      Session I**

Introduction by the Organizers: Alla Karpova and Zach Mainen

8:00 pm      **Trevor Robbins**, University of Cambridge  
*Neural substrates of elements of decision-making cognition in rats*

9:00 pm      **Peter Dayan**, University College London  
*Value and Action Systems in Decision Making*

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**Monday, April 7<sup>th</sup>**

- 7:30 am Breakfast
- 8:30 am Session II: Cognition**
- 8:30 am **Zach Mainen**, Cold Spring Harbor Laboratory  
*Neural mechanisms for odor-guided spatial decisions in the rat*
- 9:00 am **Tony Zador**, Cold Spring Harbor Laboratory  
*Neural correlates of attention in rodent auditory cortex*
- 9:30 am **Carlos Brody**, Princeton University  
*Neural dynamics underlying cognitive flexibility*
- 10:00 am Break and Group Picture
- 10:30 am **Howard Fields**, University of California  
*Ventral striatal neuronal firing patterns imply a role in valuation and action selection*
- 11:00 am **Shih-Chieh Lin**, Duke University Medical Center  
*Neuronal ensemble bursting in the basal forebrain encodes salience irrespective of valence*
- 11:30 am **Yael Niv**, Princeton University  
*Tonic dopamine, motivation and the optimal choice of response rates in free operant behavior*
- 12:00 pm **Paul E. M. Phillips**, University of Washington  
*Making the right decision: Cost-Benefit analysis by mesolimbic dopamine*
- 12:30 pm **Peter Shizgal**, Concordia University  
*The role of dopamine tone in the allocation of behavior to the pursuit of rewards*
- 1:00 pm Lunch
- 1:30 pm Tour (optional)
- 2:30 pm Workshops**  
*W1. Sensory-guided decisions: Dima Rinberg, Don Katz*  
*W2. Learning and decisions: Yael Niv, Randy Gallistel*  
*W3. Action and cognition: Doug Nitz, Simon Killcross*  
*W4. Economic decisions: Mark Walton, Matthew Roesch*

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**4:30 pm**      **Poster Reception**

6:00 pm      Dinner

**7:00 pm**      **Workshop Discussion**

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**Tuesday, April 8<sup>th</sup>**

7:30 am Breakfast

**8:30 am Session III: Economics**

8:30 am **Mark Walton**, University of Oxford  
*Frontal and monoamine contributions to cost-benefit decision making*

9:00 am **Adam Kepecs**, Cold Spring Harbor Laboratory  
*Neural correlates and behavioral impact of decision confidence*

9:30 am **Charles Gallistel**, Rutgers University  
*Risk assessment in man and mouse*

10:00 am Break

**10:30 am Session IV: Hippocampus and Others**

10:30 am **Loren M. Frank**, University of California, San Francisco  
*Hippocampal novelty signaling and competitive plasticity during learning*

11:00 am **Matt Wilson**, Massachusetts Institute of Technology  
*Sequential event memory formation and reactivation in the hippocampus and beyond*

11:30 am **A. David Redish**, University of Minnesota  
*Neural coding in the hippocampus and striatum during decision-making*

12:00 pm **Geoff Schoenbaum**, University of Maryland School of Medicine  
*Understanding behavior through single-unit recording*

12:30 pm Lunch

**2:00 pm Workshops**

*W5. Theory and analysis: XJ Wang, Carlos Brody*  
*W6. Behavior: Naoshige Uchida, Adam Mar*  
*W7. Recordings: Mark Anderman, Mark Laubach*  
*W8. Perturbation: Susana Lima, Walter Lerchner*

**4:00 pm Poster Reception**

6:00 pm Dinner

**7:00 pm Workshop Discussion**

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**Wednesday, April 9<sup>th</sup>**

- 7:30 am Breakfast
- 8:30 am Session V: Action**
- 8:30 am **Bernard Balleine**, University of California, Los Angeles  
*Corticostriatal circuits in goal-directed action and habit*
- 9:00 am **Mark Laubach**, Yale University School of Medicine  
*Dynamic encoding of stimulus value by the dorsomedial striatum*
- 9:30 am **Rui Costa**, National Institutes of Health  
*Iteration and generalization in choice and habit*
- 10:00 am Break
- 10:30 am Session VI: Techniques/Circuits**
- 10:30 am **Gyorgy Buzsaki**, Rutgers University, Newark  
*Predicting behavioral outcome from hippocampal cell assembly activity*
- 11:00 am **David J. Anderson**, California Institute of Technology  
*Genetic silencing of amygdalar microcircuits underlying fear conditioning in mice*
- 11:30 am **Karl Deisseroth**, Stanford University  
*Fast multimodal optical interrogation of neural circuitry: development and applications*
- 12:00 pm **Karel Svoboda**, Howard Hughes Medical Institute  
*Functional analysis of neocortical circuits*
- 12:30 pm **David W. Tank**, Princeton University  
*Neural circuit dynamics in head-fixed awake mobile mice*
- 1:00 pm Closing Comments and Discussion
- 1:15 pm Lunch (*Take out boxes from Servedy & shuttles to Dulles available*)
- 1:15 pm First shuttle to Dulles
- 2:00 pm Second shuttle to Dulles
- 2:45 pm Last shuttle to Dulles