

Sunday, March 26

- 3:00 pm Check-in
- 6:00 pm Reception (*Lobby*)
- 7:00 pm Dinner
- 8:00 pm Welcome and Opening Remarks**
- 8:00 pm Keynote: Mandyam V. Srinivasan**, University of Queensland
Visual guidance of flight in bees and birds
- 9:00 pm Refreshments available at Bob's Pub

NOTE:

Meals are in the **Dining Room**
Talks are in the **Seminar Room**
Posters are in the **Lobby**

Talks are 20 min + 5 min for Q&A

Monday, March 27

- 7:30 am Breakfast (*service ends at 8:45 am*)
- 9:00 am Session 1: Active sensation I**
Chair: David Kleinfeld
- 9:00 am **Daniel H. O'Connor**, Johns Hopkins University
Coding of touch and self-motion by Merkel cell-associated afferents
- 9:25 am **Ehud Ahissar**, Weizmann Institute of Science
The CLP hypothesis: Closing an active sensation loop with $x \equiv$ perception of x
- 9:50 am **Mathew E. Diamond**, International School for Advanced Studies (SISSA)
Temporal integration in whisker-mediated behavior
- 10:15 am Break
- 10:45 am Session 2: Active sensation II**
Chair: Anne K. Churchland
- 10:45 am **Karel Svoboda**, Janelia Research Campus/HHMI
TBD
- 11:10 am **Kathleen Cullen**, McGill University
Vestibular processing during active self motion: Implications for perception and action
- 11:35 am **Troy Margrie**, Sainsbury Wellcome Centre
Egocentric and allocentric motion signaling in L6 of primary visual cortex
- 12:00 pm Lunch (*service ends at 1:00 pm*)
- 2:00 pm Session 3: Hippocampal representations of space and experience I**
Chair: Matteo Carandini
- 2:00 pm **Shigeyoshi Fujisawa**, RIKEN Brain Science Institute
Representations of spatial information of self and other in the hippocampus
- 2:25 pm **Mayank R. Mehta**, University of California, Los Angeles
Multisensory control of hippocampal spatial and directional selectivity
- 2:50 pm **Dmitriy Aronov**, Columbia University
Mapping of a continuous non-spatial dimension by the hippocampal/entorhinal circuit

- 3:15 pm Break
- 3:45 pm Session 4: Hippocampal representations of space and experience II**
Chair: Julija Krupic
- 3:45 pm **James J. Knierim**, Johns Hopkins University
Self-motion vs. landmark cues in the control of hippocampal place fields
- 4:10 pm **Elizabeth Buffalo**, University of Washington School of Medicine
Eye movements and spatial representation in the primate hippocampal formation
- 4:35 pm **Stefan Leutgeb**, University of California, San Diego
Dependence of memory on precisely coordinated oscillations
- 5:00 pm Break
- 5:30 pm Poster Reception
- 7:00 pm Dinner
- 8:00 pm Session 5: Navigation and complex behaviors**
Chair: Georg B. Keller
- 8:00 pm **Nachum Ulanovsky**, Weizmann Institute of Science
From active sensing to 3D goal-directed navigation in bats
- 8:25 pm **Massimo Vergassola**, University of California, San Diego
Active navigation of turbulent environments
- 8:50 pm Refreshments available at Bob's Pub

Tuesday, March 28

- 7:30 am Breakfast (*service ends at 8:45 am*)
- 9:00 am Session 6: Active sensation III**
Chair: Jill K. Leutgeb
- 9:00 am **Dmitry Rinberg**, NYU Neuroscience Institute
Concentration invariant odor identity coding
- 9:25 am **Anastasia Kurnikova**, University of California, San Diego
Welker 2.0. Coordination of exploratory orofacial motor actions
- 9:50 am **Martin Deschênes**, Centre de Recherche Université Laval Robert-Giffard
Circuits that control the set-point of whisking
- 10:15 am Break
- 10:45 am Session 7: Active sensation and collective behavior**
Chair: Kathleen Cullen
- 10:45 am **Naoshige Uchida**, Harvard University
Forelimb motor adaptation in mice
- 11:10 am **Daniel D. Lee**, University of Pennsylvania
Decision making and manifolds in intelligent systems
- 11:35 am **Elad Schneidman**, Weizmann Institute of Science
Efficient collective foraging in groups of information seeking agents
- 12:00 pm Lunch (*service ends at 1:00 pm*)
- 1:00 pm Tour (*optional - meet at reception*)
- 2:00 pm Session 8: Active vision**
Chair: Mathew E. Diamond
- 2:00 pm **Matteo Carandini**, University College London
Vision, decision, and navigation in mouse parietal cortex
- 2:25 pm **Charles Schroeder**, Nathan Kline Institute and Columbia University Medical Center
Influence of eye movements on neuronal oscillatory activity during active vision
- 2:50 pm **Georg B. Keller**, Friedrich Miescher Institute for Biomedical Research
Active sensory processing in mouse visual cortex

- 3:15 pm Break
- 3:45 pm Session 9: Sensory processing and decision-making I**
Chair: Elizabeth Buffalo
- 3:45 pm **Vanessa Ruta**, Rockefeller University
Circuit mechanisms for flexible sensory processing in Drosophila
- 4:10 pm **Anne K. Churchland**, Cold Spring Harbor Laboratory
A multisensory approach for understanding decision circuits
- 4:35 pm **Vincent Bonin**, Neuro-Electronics Research Flanders
Encoding of multimodal information in the mouse visual cortex during active sensing
- 5:00 pm Break
- 5:30 pm Poster Reception
- 7:00 pm Dinner
- 8:00 pm Session 10: Sensory processing and decision-making II**
Chair: Nachum Ulanovsky
- 8:00 pm **Dougal Tervo**, Janelia Research Campus/HHMI
The role of the medial prefrontal cortex in learning and decision-making
- 8:25 pm **Keren Haroush**, Harvard Medical School and Massachusetts General Hospital
Decision making in social context
- 8:50 pm Refreshments available at Bob's Pub

Wednesday, March 29

- 7:30 am Breakfast (*service ends at 8:45 am*)
- 9:00 am Session 11: Navigation I**
Chair: Karel Svoboda
- 9:00 am **Jeffrey S. Taube**, Dartmouth College
Critical factors that influence grid cell firing
- 9:25 am **Lisa Giocomo**, Stanford School of Medicine
Coordinated modulation of grid and speed cells by self-motion cues
- 9:50 am **Julija Krupic**, The Salk Institute
Local transformations of entorhinal grid maps
- 10:15 am Break
- 10:45 am Session 12: Navigation II**
Chair: Charles Schroeder
- 10:45 am **Jill K. Leutgeb**, University of California, San Diego
Distinct cell types for memory and spatial representations in medial entorhinal cortex
- 11:10 am **Daniel Goldman**, Georgia Institute of Technology
Sensing slip on potentially sliding substrates. Sometimes.
- 11:35 am Closing Discussion**
- 12:00 pm Lunch and Departure
- 12:30 pm First shuttle to Dulles
1:30 pm Second shuttle to Dulles
2:30 pm Last shuttle to Dulles