

SAND7

MAY 27-29, 2015

Note: Times in italics are approximate

WEDNESDAY, MAY 27, 2015

SESSION I
1:00 – 5:00 pm

343 Alumni Hall, University of Pittsburgh, 4227 5th Avenue

Byron Yu, Carnegie Mellon University
Keynote Lecture: *Neural constraints on learning*

Adam C. Snyder, University of Pittsburgh
Decoding time-varying attentional states using high-dimensional population activity

Nathaniel C. Wright, Washington University, St. Louis
Dynamics of cortical noise correlations during vision

~2:45 pm

Break

Matt Wilson, MIT
KEYNOTE LECTURE: *TBA*

Discussant: **Uri Eden**, Boston University

Kensuke Arai, Boston University
Oscillations at various frequency bands are present in bulk, continuous-valued neural recordings like electroencephalograms (EEG) and local field potential (LFP)

Behtash Babadi, University of Maryland, College Park
Robust estimation of compressible point process models with application to neuronal modeling

5:00-7:00 pm

Informal Discussion & Social (Snacks & cash bar)
Bridges Lounge at the Wyndham University Center, 100 Lytton Avenue

7:00

Dinner (*on your own*)

THURSDAY, MAY 28, 2015

SESSION II
9:00 – 11:35 am

343 Alumni Hall, University of Pittsburgh, 4227 5th Avenue

Michael I. Miller, Johns Hopkins University

KEYNOTE LECTURE: *Neuroinformatics, computational anatomy and brain clouds at the morphome scale*

Discussant: **Sri Sarma**, Johns Hopkins University

Santosh Chandrasekaran, Carnegie Mellon University

Unbiased, high-throughput electron microscopy analysis of experience-dependent synaptic changes

~10:25 am

Break

Xinyi Deng, Boston University

Clusterless decoding of position from multiunit activity using a marked point process filter

Patrick N. Lawlor, Northwestern University

Time warping as a source of trial-to-trial variability

11:35 am

Lunch (*on your own*)

SESSION III
1:30 – 4:25 pm

343 Alumni Hall, University of Pittsburgh, 4227 5th Avenue

Mohammad Azar, Northwestern University

Training brain-machine interfaces without supervised data: A distribution alignment approach

Tamar Melman, Weill Cornell Medical College

Robust multitaper spectral analysis of EEG signals with Bayesian confidence limits

Burcin Simsek, University of Pittsburgh

On the distribution of photon counts with censoring in two-photon laser scanning microscopy

~2:50 pm

Break

Mark Schnitzer, Stanford University

KEYNOTE LECTURE: *Reading the neural code in behaving animals ~1000 neurons at a time*

Discussant: **Susanne Ahmari**, University of Pittsburgh

- 4:25-5:00 pm Free Time / Presenters set up posters
- 5:00-6:30 pm Poster Session (even numbered) begins
Ballroom B, The University Club, 123 University Place
- 6:30-7:30 pm Dinner
Ballroom A, The University Club, 123 University Place
- 7:30-9:00 pm Poster Session (odd numbered) continues with Dessert

FRIDAY, MAY 29, 2015

SESSION IV 343 Alumni Hall, University of Pittsburgh, 4227 5th Avenue
9:00 am - 12:20 pm

Adrienne Fairhall, University of Washington
KEYNOTE LECTURE: *TBA*

Discussant: **Jonathan Victor**, Weill Cornell Medical College

Giuseppe Vinci, Carnegie Mellon University
Separating spike correlation from trial-to-trial firing rate correlation

Leila Wehbe, Carnegie Mellon University
One-step hypothesis testing for functional neuroimaging

~10:45 am Break

Sebastian Seung, Princeton University
Title: *Structural clues to a visual function: Direction selectivity in the retina*

Discussant: **TBA**

12:30 pm Adjourn