

# Neuronal Ensembles 2022

Wednesday, May 4th, 2022

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Hosted by the NeuroTechnology Center at Columbia University  
Sponsored by the Tianqiao & Chrissy Chen Institute

US Eastern Time    European Time  
EDT (UTC -4)    CEDT (UTC +2)

## Introduction

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09:00 - 09:05 AM    15:00 - 15:05    Emre Yaksi, Rosa Cossart, and Rafael Yuste (Organizers)

## Session 1

### *Methods* Moderated by Rafael Yuste

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09:05 - 09:35 AM    15:05 - 15:35    Misha Ahrens, HHMI Janelia  
*A Positional Integrator in the Vertebrate Hindbrain*

09:35 - 10:05 PM    15:35 - 16:05    Valentina Emiliani, Paris Institut de la Vision  
*Ultrafast Light Targeting for High-throughput Precise Control of Neuronal Networks*

10:05 - 10:35 AM    16:05 - 16:35    Carsen Stringer, HHMI Janelia  
*Visualizing the Geometry of Neural Activity with Rastermap*

10:35 - 10:50 AM    16:35 - 16:50    *Panel Discussion*

10:50 - 11:00 AM    16:50 - 17:00    *Break*

## Session 2

### *Cnidarians* Moderated by Emre Yaksi

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11:00 - 11:30 PM    17:00 - 17:30    Rafael Yuste, Columbia University  
*Reading the Mind of a Cnidarian: Neuronal Ensembles in Hydra Vulgaris*

11:30 - 12:00 PM    17:30 - 18:00    Raoul-Martin Memmesheimer, University of Bonn  
*From Single Neurons to Jellyfish Behavior & Drifting Assemblies for Persistent Memory*

12:00 - 12:30 PM    18:00 - 18:30    David Anderson, Caltech  
*Neuronal Ensembles in a Model Jellyfish*

12:30 - 12:45 PM    18:30 - 18:45    *Panel Discussion*

12:45 - 01:00 PM    18:45 - 19:00    *Break*

## Session 3

### *Bilaterians* Moderated by Rosa Cossart

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01:00 - 01:30 PM    19:00 - 19:30    Vivek Jayaraman, HHMI Janelia  
*Understanding How Neuronal Ensembles Perform Navigational Computations in Flies*

01:30 - 02:00 PM    19:30 - 20:00    Lisa Giocomo, Stanford University  
*Multiple Maps for Navigation*

02:00 - 02:30 PM    20:00 - 20:30    Claudia Clopath, University College London  
*Modeling Perturbation of Neural Ensembles*

02:30 - 03:00 PM    20:30 - 21:00    *Panel Discussion*

## Closing Remarks

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03:00 - 03:10 PM    21:00 - 21:10    Emre Yaksi, Rosa Cossart, and Rafael Yuste

03:10 - 03:15 PM    21:10 - 21:15    Dr. Yan Li, Tianqiao & Chrissy Chen Institute