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Ecole des  
Neurosciences  
Paris Ile-de-France

*bme* Paris  
BioMedical Engineering  
MASTER PROGRAM

## INC Day 2018: Collective Brains



Friday, October 12, 2018

Amphithéâtre Vulpian, Université Paris Descartes

12, rue de l'Ecole de Médecine, Paris 6ème

**Organizers :** Cendra Agulhon (FR3636, Paris Descartes), Samuel Bottani (Laboratoire Matière et Système complexes, Paris Diderot), C. Meunier (Centre de Neurophysique, Physiologie et Pathologie, Paris Descartes), F. Waszak (Laboratoire Psychologie de la Perception, Paris Descartes)

In partnership with the Biomedical Engineering - Paris international Master program

### Program

**9:00-9:30 Breakfast and Welcome Address**

**9:30-10:30**

- **Keynote Lecture by Nikos Logothetis** (Max Planck Institute for Biological Cybernetics, Göttingen) *Dynamic Connectivity related to System and Synaptic Memory Consolidation*

## **10:30-12:30 Session Collective Dynamics of the Brain I**

- **Alexander Reyes** (NYU, USA) *Synaptic and network mechanisms underlying in vivo firing dynamics*
- **Anne-Marie Oswald** (Pittsburgh University) *The many relationships between excitation and inhibition in piriform cortex*
- **Anna Levina** (Tübingen University) *Assessing brain states and their impact on cortical computations*

## **12:30-14:00 Lunch in Galerie Saint-Germain**

## **14:00-16:00 Session Collective dynamics of the Brain II**

- **David Hansel** (CNPP, Paris Descartes) *Insights from the brain*
- **Yoram Burak** (Hebrew University, Jerusalem) *Collective plasticity dynamics in recurrent neural networks*
- **Catherine Villard** (Institut Curie, Paris) *Insights into the dynamics of neuronal growth at the single and collective cell level*

## **16:00-16:30 Coffee break**

## **16:30-18:30 Session Collective Intelligence : Humans, Animals and Robots**

- **Daphna Shohamy** (Columbia University, New York) *How Memory Guides Value-Based Decisions*
- **José Halloy** (Paris Diderot) *Bio-hybrid collective behaviors in mixed groups of animals and robots*
- **Jean-Marc di Meglio** (Paris Diderot) *Collective migration and differentiation in the social amoeba*

## **18:30-19:00 Conclusion and Refreshments**