

Interacting with the world: from neurons to social behavior

Wednesday, September 25, 2024 2:30 PM (1h 30m)

Every day we interact with the world around us, and our ability to have successful social interaction depends on our ability to integrate different information coming from different social contexts. To this end, studies on animal models can provide valuable insights, offering a controlled environment to investigate neural mechanisms, explore behavioral dynamics, and understand the evolutionary underpinnings of social behavior.

The aim of this symposium is to present recent findings that provide novel insights into how single neurons encode socially relevant variables. Giamundo will talk about the neural processing of vocalizations in primates, showing that neurons in the anterior temporal lobe are modulated not only by the voices of conspecifics but also by human voices, providing new understandings for the study of interspecies communication. Ceccarelli will discuss how the representation of actions performed by others changes dynamically over time, with neurons in the macaque premotor cortex developing an anticipatory response during observation learning. Nougaret's talk will show how the macaque frontal pole is involved in monitoring actions performed by others to change or maintain a choice based on the observed outcome. Finally, Antonelli will discuss how interbrain synchrony is affected during an emotion recognition task in interacting mice presenting calcium imaging data from the anterior cingulate cortex.

The purpose of this symposium is to advance our understanding of the basic mechanisms of brain functions involved in social interaction, which is crucial to studying conditions like autism, and to develop targeted interventions that enhance the quality of life for affected individuals.

If you're submitting a poster, would you be interested in giving a blitz talk?

No

If you're submitting a symposium talk, what's the symposium title?

If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?

No

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