6 JULY 2023, 3:00 pm
AULA MAGNA EDERLE
(Via Belzoni 160, Padova)

PNC SEMINARS

A talk by Andrea Serino (University Hospital of Lausanne – CHUV)

PERIPERSONAL SPACE (PPS) AS AN INTERFACE FOR SELF-ENVIRONMENT INTERACTIONS

Peripersonal space (PPS) is the region where body-environment interactions predominantly occur. It is represented by a specialized neural system that integrates external cues and tactile stimuli, acting as a fundamental interface between individuals and their surroundings.

This presentation examines the neural and computational mechanisms of PPS in humans, along with its primary functions and properties. I will present data about the dynamic nature of PPS and its optimization for body-environment interactions. I will explore the reciprocal relationship between PPS and social interactions, emphasizing its involvement in social cognition and susceptibility to social modulation.

Finally, I will discuss the pivotal role of PPS in self-consciousness, including a novel electrophysiological paradigm for measuring PPS. This paradigm has revealed markers of self-consciousness in newborns, during sleep stages, and in patients with disorders of consciousness.

Overall, this presentation offers insights into the multifaceted nature of PPS, its implications for social cognition, and its significance in self-consciousness.

<u>Biography</u>

Andrea Serino, Prof, PhD is currently Professor at the University Hospital of Lausanne, where he directs MySpace Lab and the Neurorehab Research Center.

He got his PhD in 2006 from the University of Bologna. He has been Visiting Scientist at the Institute of Cognitive Neuroscience of University College London (2005), Assistant Professor at the University of Bologna (2006-2012), Senior Scientist at the Center of Neuroprosthetics of the École Polytechnique Fédérale de Lausanne (EPFL), and Head of Neuroscience at MindMaze (2016-2022).

MySpace Lab investigates the neural basis of body representation in space for action, perception and consciousness. Neurorehab has the mission of translating this knowledge to develop novel solutions for neurological disease.

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