PADOVA
neuroscience
CENTER

15 FEBRUARY 2024 3:00 pm

SALA SEMINARI VIMM

(Via Giuseppe Orus 2, Padova)

PNC SEMINARS

A talk by Paola Sessa (University of Padova)

BRIDGING THE GAP: INTEGRATING FACIAL PROCESSING AND EMBODIMENT RESEARCH

This presentation delves into the role of embodiment and sensorimotor simulation in processing facial expressions, challenging traditional views with insights from studies on healthy participants and Moebius Syndrome (MBS) patients, who have facial palsy. It begins by emphasizing the evolutionary sophistication of human facial muscles for non-verbal communication and introduces the core and extended systems in the brain responsible for interpreting these expressions. Through a series of experiments, the speaker explores how altered facial mimicry affects perception, awareness, and memory of emotions, revealing nuanced findings that also suggest empathy and alexithymic traits play significant roles. The conclusions advocate for an integrated model of emotion recognition that combines embodiment with cognitive processing/strategies, suggesting that understanding emotion is more complex than previously thought.

"Padova Neuroscience Center – PNC"
email: administration.pnc@unipd.it; phone: +39 (0)49 8212623
www.pnc.unipd.it

Biography

Paola Sessa is Associate Professor at the Dept. of Developmental Psychology and Socialisation (DPSS) in Padova.

She obtained her PhD in Cognitive Sciences in 2005 at the University of Padova. Much of her initial research was on basic attentional and visual working memory processes. Currently she directs the Electroencephalography Laboratory at the Dept. of Developmental and Social Psychology, and she is a member of the Cognition and Language Laboratory (CoLab) and of the Padova Neuroscience Center (PNC) of the same University. She is Associate Editor of Scientific Reports and *ad hoc* reviewer for 18 International journals.

Her research mostly focuses on empathy and simulative processes and on their neural underpinnings by using techniques with high temporal resolution, such as the EEG and ERP. She is also planning to use hyperscanning (co-registration of brain activity from two or more interacting individuals) to study these same processes in a more ecological and potentially informative setting.

A different line of research mostly focuses on using EEG/ERP to study how social cues conveyed by human faces, such as emotional expressions, group membership, gaze direction and perceived trustworthiness may shape low-level processes, in particular resolution of faces' representations in visual working memory.