



P A D O V A
neuroscience
C E N T E R

26 MARCH 2026 3:00 pm

SALA SEMINARI VIMM

(Via Giuseppe Orus 2, Padova)

PNC SEMINARS

A talk by Giorgio Arcara

(University of Padova)

BRIDGING COGNITIVE NEUROSCIENCE AND CLINICAL NEUROPSYCHOLOGY (WITH OPEN SCIENCE IN MIND)

In this talk, I will discuss my research lines over the last 10 years, encompassing Cognitive Neuroscience (with a focus on neurophysiological techniques such as EEG and MEG) and Clinical Neuropsychology (with a focus on improving measurement in clinical practice). The presentation will cover my main studies and some proposals on how to bridge these two domains, highlighting key open challenges, and proposing a research agenda to address them. It will also illustrate how this research agenda can benefit from an Open Science approach and discuss the structural and practical obstacles to openness that must be confronted.

Biography

Giorgio Arcara obtained his Master's Degree in Psychology in 2005, and in 2010 he was awarded his PhD in Psychobiology from the University of Padova. He then worked at the IRCCS San Camillo Hospital in Venice, and he currently serves as an Associate Professor of Psychometrics at the Department of General Psychology.

His scientific activities in the last years were dedicated, among the others, to the use of magnetoencephalography (MEG) and high-density electroencephalography (High-Density EEG), especially in the context of clinical research.

His research interests mainly include:

- Cognitive Neuroscience with a focus on neuroscience of language and communication;
- Neurophysiology with a focus on neurophysiological correlates of predictive processing and on biomarkers of stroke recovery;
- Psychometrics with a focus on the development of new neuropsychological tests and on methodological improvements in clinical neuropsychology;
- Statistical analysis with the application of advanced analytical methods (Mixed models, Generalized Additive Models, Machine Learning, etc.);
- Open Science with a focus on sharing knowledge, sharing data, and reproducibility of analysis code.