







IUSS Cognitive Neuroscience center ICON Seminar

LANGUAGE WITHOUT LANGUAGE (BUT REALLY?)

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Abstract

Human language is an unicum in the living realm. This is why many people assume that whatever it is in our brain that allows us to understand and produce it, it must be an unicum, too. Lots of evidence has emerged in the last 15 years or so that would seem to challenge this contention — including, but not limited to, neural networks and large language models. With the lab, we've been trying to make sense of this intricate picture, essentially trying to figure out whether and how the uniqueness of human language might have emerged from general-purpose, language-agnostic computational mechanisms — and what, instead, seems to remain very language-unique. Via the analysis of natural language and the learning of made-up lexicons in the lab, computational simulations and experiments, human subjects and reading rats, neural and behavioural data, I'll show you how my lab and I tackled this issue — and the successes (and failures) that ensued. I'll also try to share what I learned about the job on the way — how our science can be made more reliable, more inclusive and more fun.

September 18th 2024, 2:00PM - 4:00PM IUSS, Sala del Camino Palazzo Broletto, Piazza della Vittoria n. 15 - Pavia

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