

Paco Calvo 13/03 h 10:00-12:00
Planta Sapiens, Homo Stupidus

Abstract:

Cognitive science provides the means to make headway in the quest for plant intelligence. Contrary to common belief, plants are not merely acted upon; they rather take action autonomously according to their own needs. To do so, self-propelled mobility is needed—although, unlike animal locomotion, plant movement takes the form of growth and development. Unfortunately, the default understanding of the relation between mobility and cognition is by resorting to an orthodox information-processing paradigm. By having an informed debate about the ‘architecture of plant cognition’, we may engage with empirical investigations somewhat differently. Recent research in neural network theory, theoretical neuroscience and perceptual psychology pinpoints parallel distributed processing, predictive processing, and ecological psychology as fruitful models of cognition. At MINT Lab we re-situate the quest for plant intelligence into a broader approach in cognitive science, as represented by these schools of thought. Plant science can graft onto these investigations and benefit from integrating their theoretical and methodological paradigms. On the other hand, the evolution of sentience has become a hot topic of research in recent years. Cognitive science cannot rule out non-animal forms of life having structures that promote awareness. My talk explores the very possibility and consequences of plant sentience. This approach may ultimately bear upon our understanding of life and cognition more broadly, reaching all the way from single cell organisms to human beings, including plants.