Multiscale Ecologies of Memory

Mathematics, Living Systems and Artistic Research

Date and venue: 24–25 September 2026, Palazzo della Provincia, Bari, Italy

Curator: Valentina Vetturi, as part of her performative artistic research *Mimosa Pudica* (2024–ongoing)

Contributors: Maria Concetta De Pinto (University of Bari, Italy); Delio Mugnolo (FernUniversität in Hagen, Germany; Chair of COST Action mSPACE); Giulia Annalinda Neglia (Politecnico di Bari, Italy); Teresa Numerico (Roma Tre University, Italy); Alessio Pollice (University of Bari, Italy); Sanja Puljar D'Alessio (University of Rijeka, Croatia). **Reading by**: Anna D'Elia Belli

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Image credit: Valentina Vetturi, *Mimosa Pudica. To Be Somewhere in Particular*. Shared observation session along the Bari coastline, 24 September 2026, ph. Raffaele Bussetti.

FINAL REPORT

Multiscale Ecologies of Memory emerged from the encounter between COST Action ***mSPACE*** – Multiscale Stochastics, Patterns and Analysis of Combinatorial Environments – and ***Mimosa Pudica*** (2024–ongoing), a long-term performative artistic research exploring plant memory and its implications for imagining and practising digital ecologies.

Bringing together researchers from mathematics, plant biology, ecology, statistics, anthropology, philosophy, architecture and artistic research, the symposium explored memory and observation across different spatial and temporal scales through presentations, roundtables and a shared observation session.

The first day featured Sanja Puljar D'Alessio, who examined the rhythms and transformations of the open landscape of the Croatian island of Cres through multispecies relationships; Alessio Pollice, who addressed ecological data, statistical modelling and uncertainty; and Delio Mugnolo, who explored memory through mathematical modelling, diffusion processes and spectral geometry, examining how the evolution of diffusion retains information about the geometry of its environment. Their contributions were followed by *The Nuances of Observation*, a roundtable moderated by Teresa Numerico.

In the afternoon, the symposium moved to the rocky Bari coastline for *Mimosa Pudica. To Be Somewhere in Particular*. At a coastal site where a semicircular seating area had been arranged using logs, Vetturi introduced the conceptual and methodological questions underpinning *Mimosa Pudica*, inviting participants to approach plant observation as a form of generosity and to follow their own rythm. After the practice, the group reconvened to share observations and reflections.

The second day featured Maria Concetta De Pinto, who discussed the cellular and molecular mechanisms of plant memory; Teresa Numerico, who reflected on relationships between biological and technological memory; and Giulia Annalinda Neglia, who approached landscape as a multiscalar archive of cultural memory and adaptive ecologies.

The concluding roundtable, *Threads and afterthoughts*, moderated by Sanja Puljar D'Alessio, brought together questions raised throughout the symposium. Among the contributions to the discussion, historian Carlo Spagnolo raised the question of how models are defined and constructed across different disciplines. The event concluded with a reading by Anna D'Elia Belli from *Comitato di sostegno alle erbe infestanti. Comunicato* by Manuela Draegher.

The symposium opened possibilities for further exchange and collaboration among participants, who expressed an interest in meeting again and continuing to develop questions that emerged in Bari and to work on a possible publication. As the first public collaboration between *mSPACE* and *Mimosa Pudica*, the symposium established a starting point for continued dialogue between mathematical research, living systems and artistic practice.

Symposium Programme and Book of Abstracts
https://www.fernuni-hagen.de/analysis/forschung/veranstaltungen/multiscaleecologiesofmemory.shtml

mSPACE
https://ca-mspace.eu/

Mimosa Pudica
https://www.valentinavetturi.com/portfolio/mimosa-pudica/