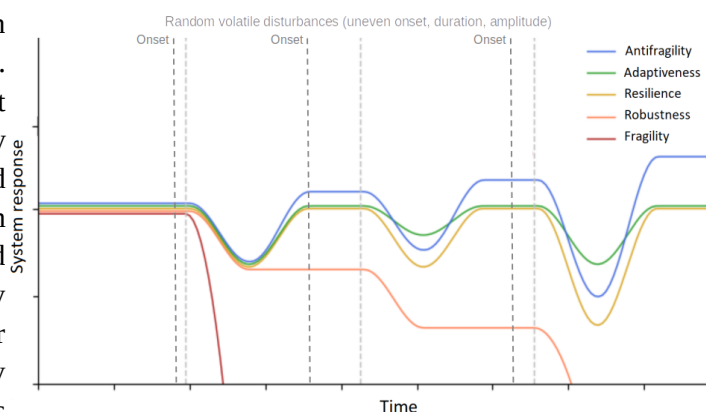


## Special Session

### Antifragile dynamical systems: beyond robustness, resilience, and adaptiveness

Antifragility characterizes the benefit of a dynamical system derived from the variability in environmental perturbations and volatility. Antifragility carries a precise definition that quantifies a system's response to input variability and uncertainty in time. Systems may respond poorly to perturbations (fragile) or benefit from perturbations (antifragile). While there is a broad overlap in methods used to quantify and apply antifragility across disciplines, there is a need for precisely defining the scales at which antifragility operates and consolidate the underlying principles for real-world deployments.



The goal of this special session, organized by the Applied Antifragility Research Group is to encourage the community to consider antifragility a "first-class citizen" beyond what dynamical systems analysis has already postulated in the robustness – resilience – adaptiveness continuum. We are happy to receive both theoretical treatments of neural networks and machine learning systems as well as applications results along the lines of the robustness – resilience – adaptiveness – antifragility spectrum.

#### Submission instructions

For submission, please follow the link to

<https://equinocs.springernature.com/service/ICANN2024>

and click on "Submit now". If you already have an account, log in and follow the steps the system suggests to you (you may have to click "Submit now" a second time), otherwise you will have to create an account first. Select track Antifragile Dynamical Systems. Accepted papers to the special session will appear in the proceedings of the ICANN 2024 conference.

**Please note:** The review process of the ICANN 2024 is double-blind. This means that the identity of the reviewers is unknown, but also that the reviewers will not see the list of authors of the paper.

#### Important dates

**Deadline for full paper submission:** March 15 2024

**Notification of Acceptance or Rebuttal:** May 15 2024

**Conference:** September 17 to September 20, 2024

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**Conference venue:** Campus of the University of Southern Switzerland and the University of Applied Sciences and Arts of Southern Switzerland, Via la Santa 1, 6962 Lugano-Viganello, Switzerland.