

DYNDEEP (Dynamics of Temporal Networks: Memory and Deep Learning)

Funding: AEI (Europa Excelencia call – available to ERC applicants reaching score A)

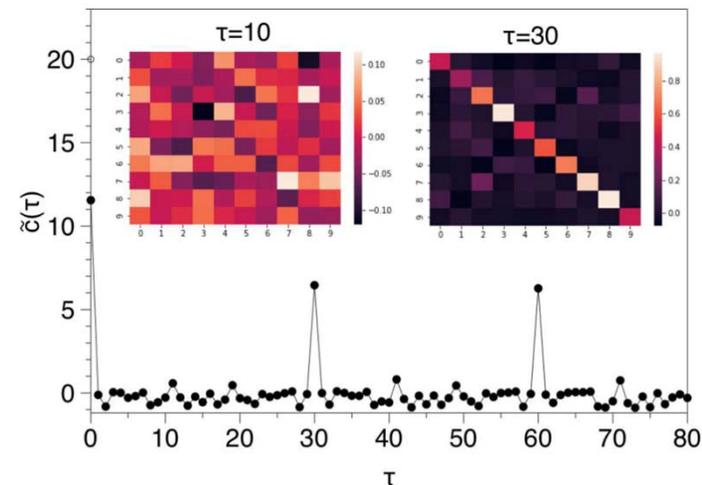
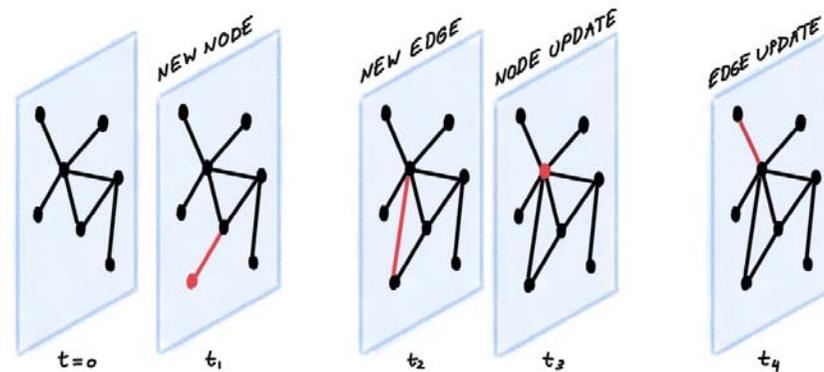
Details and Budget: monobeneficiary / 2 years (2021-2023) / 93kEUR / CSIC

People: Lucas Lacasa (PI), Lluís Arola-Fernández (Postdoc)

What is this about?

* Apply tools from **Dynamical Systems Theory** and Stochastic Processes to characterize temporal **networks** (networks that evolve over time) as if they are (graph) **trajectories** (memory, dynamical stability, irreversibility, etc)

* Application: the training process of an artificial neural network through the lens of a (dynamical) temporal network theory



MISLAND (Modelling island ecological complexity in the context of global change)

Funding: AEI (Plan Nacional) / coordinated project with A. Traveset (IMEDEA)

Details and Budget: 3 years (2021-2023) / 84kEUR / CSIC

People: Victor Eguiluz (Co-PI), Lucas Lacasa (Co-PI), Mar Cuevas (FPI) + collaborators

What is this about?

* Using Network Science (Ecological Networks, HOI, temporal networks) and AI to model island ecosystems and the impact of climate change

* This subproject is coordinated with a cousin project (A.Traveset, IMEDEA), they offer field data, we do the modelling

