

# Postdoctoral Researcher: Multiscale Dynamics in Active Systems

Northwestern University: ESAM & NICO

The [Complex Systems research lab of Prof. Cristián Huepe](#) at [Northwestern University](#) is searching for a **postdoctoral researcher** to work on an ambitious project on **the role of multiscale dynamics in the self-organization of active system**.

This 3-year, fully funded position will develop **fundamental theoretical research** using analytical calculations, agent-based simulations, and datasets to **explore the relationship between the focusing of energy and information into collective modes and the emergence of coherent active states**. The successful candidate will be expected to work in close collaboration with Prof. Huepe in this well-defined project, but with a high degree of independence regarding approaches and methods.

Ideal qualifications include familiarity with field-based analytical descriptions of many-body systems (e.g., in condensed matter, fluid dynamics, etc.), experience with agent-based simulations of active systems, and the ability to work autonomously and draft papers. All highly motivated candidates with a passion for creative collaborative fundamental research and eagerness to learn quickly will be considered.

The position will be based at Northwestern University's Evanston Campus, associated to the [Northwestern Institute on Complex Systems \(NICO\)](#) and the [Applied Mathematics Department \(ESAM\)](#), in a stimulating academic environment and next to the vibrant city of Chicago.

**Applications** should be sent to [cristian@northwestern.edu](mailto:cristian@northwestern.edu), including: **1)** a complete CV with publication list, **2)** a brief description (1 page max) of research interests and their connection to this project, and **3)** two contacts (names, positions, and email addresses) for potential reference requests. Candidates from underrepresented groups and regions of the world are encouraged to apply.

**Selection will begin July 31** and continue until the position is filled. The expected **starting date is between September and December 2021**.