



01
JUIN.
2023

🕒 de 13h à 14h

📍 Salle de formation du PRABI

SÉMINAIRE

Impacts of niche construction, facilitation and mutualism in ecological communities

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Newly arrived at the LBBE, I will use this talk as an opportunity to give an overview of my research questions and theoretical toolkit, as well as the future directions I envision developing here. Broadly, I am interested in understanding how positive interactions between organisms emerge, and how they influence species traits, community structure and ecosystem functioning. I focus on indirect interactions, i.e. mediated by environmental modification, such as nutrient accumulation in plant communities and cross feeding between bacteria. Using a variety of ecological examples, I will show how positive interactions affect species niches, in turn altering the outcome of competition, with important consequences on the functioning of these communities. In the second part of the talk, I will move to the question of the evolutionary emergence and maintenance of these positive interactions in ecological communities. Using eco-evolutionary tools, I will show that these positive interactions are often counter-selected, a general consequence of the tragedy of the commons. I will conclude by discussing how explicitly accounting for the role of space seems key to explaining the emergence of positive interactions in ecological communities.