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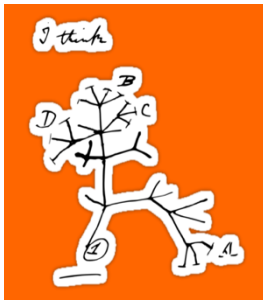

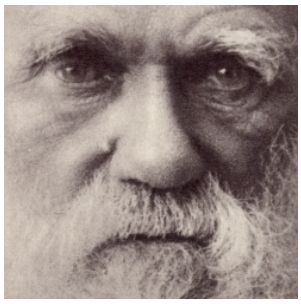

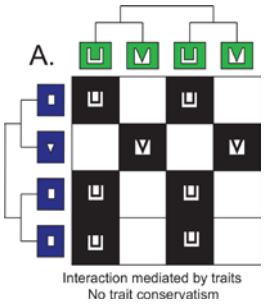

Seminar(i)

Functional Redundancy and the Structure and Stability of Mutualistic Networks

Vinicius Augusto Galvão Bastazini

Theoretical and Experimental Ecological Station
CNRS-Paul Sabatier University

Mutualistic interactions have a preponderant role in shaping eco-evolutionary dynamics, biodiversity patterns and ecosystem functioning. It is largely expected that species traits are likely to modulate biological interactions in predictable ways, as well as the response of ecological communities to cascading effects, such as species loss. The extinction of a species should be insignificant if all other species within a community are highly redundant in their trait values. On the other hand, if each species performs different functions, species loss should have drastic and irreparable effects. As species traits are largely a legacy of their evolutionary history, understanding how traits evolve along the phylogenetic history of a clade becomes crucial in order to grasp the outcomes of ecological response to disturbances. In this talk, I intend to demonstrate how eco-evolutionary dynamics affects mutualistic network structure and stability. Using simulations and empirical data, I will show the consequences of the loss of functional diversity to mutualistic networks, the role of trait redundancy in buffering extinction cascades, and how distinct modes of trait evolution might mediate these ecological responses to species loss.

WHERE?	Seminar room - SS6 (Institutes building floor -1)
WHEN?	Monday 10/12/2018 – 12:00 h