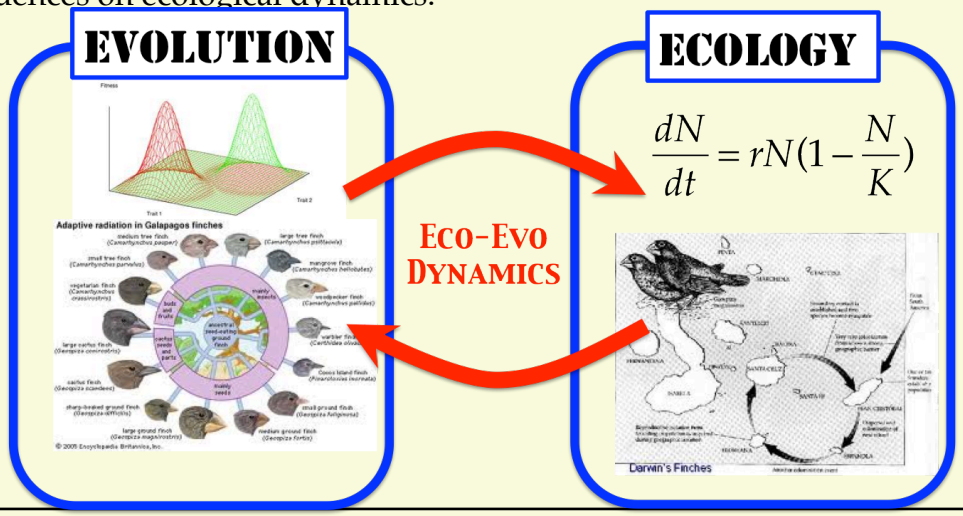
GCOE共催 MEセミナー

九州大学 箱崎キャンパス 理学部3号館 第2会議室　9月25日 [火] 13:30-

Andrew Hendry (McGill Univ., Canada)

エコ・エボ・ダイナミクス

It is now widely recognized that substantial evolutionary change can occur on contemporary (or "ecological") time scales. This is the phenomenon of contemporary (or "rapid") evolution. What we now need to know is the extent to which contemporary evolution shapes ecological dynamics at the population, community, and ecosystem levels. I will outline a conceptual framework for these eco-evolutionary dynamics and illustrate its elements through a series of empirical examples from natural populations. These examples will be also be used to address several key questions in this emerging synthetic research field. I will close by providing a set of predictions for when evolution should have important influences on ecological dynamics.



Pierre-Olivier Cheptou (CNRS, France)

植物の移動分散と交配システムは、自然選択でどのように形成されるか

The question of how dispersal traits and mating system traits are associated in organisms has been central in evolutionary ecology, especially in plants. Baker's Law states that colonization by self-compatible organisms is more likely to be successful than colonization by self-incompatible organisms because of the ability for self-compatible organisms to produce offspring without pollination agents. This model has been very influential in plant ecology and has been applied to various ecological contexts. Data have however not established a general pattern for the association of traits. In this talk, I will discuss and clarify several aspects of Baker's Law and focus on discrepancies with population genetics theory of mating systems. I will finally present a general adaptive dynamics metapopulation model analysing the joint evolution of seed dispersal and self-fertilisation. The model reveals that evolutionary processes do not necessarily lead to Baker's predictions. I will discuss the reasons for such discrepancies and how the model may explain several empirical observations.


世話人｜　入谷 亮介 Lambtani@gmail.com