

SÉMINAIRE

The role of structural variation in evolution: flies, fish, and genomes

Claire Mérot

Université de Rennes 1 - Laboratoire Ecosystèmes, Biodiversité, Evolution

Abstract: A significant fraction of genetic diversity lies in structural genomic variation (SV), e.g. chromosomal rearrangements or copy-number variants. Recent technologies provide unprecedented access to SVs, showing their prevalence and their implication in adaptation or diversification. This is opening new prospects in the study of genetic variation and transforming our understanding of the genetic basis of evolutionary changes. Here, we will reflect on the role of SVs in the evolution of biodiversity with examples from the literature and suggest a roadmap to consider more systematically the role and function of SVs in adaptation genomics. We will support these ideas with empirical studies addressing the role of inversions in adaptation in seaweed flies and the contribution of SVs to Lake Whitefish speciation.