Symposium 1

Phylogeny in the 'omics' era: new approaches for the study of the evolution of algae and their organelles

Conveners
Olivier De Clerk, Frederik Lelialert

Key-note speakers

Heroen Verbruggen, University Melbourne, Australia
Mick Van Vlieberghe, University of Liege, Liege, Belgium

Symposium description

In a not so distant past, biologists were happy assessing relationships between different organisms using sequences of a single gene. This approach, although fruitful in many cases, did not always succeed to reconstruct phylogenies successfully. A limited amount of phylogenetic signal, reflected in short internal branches, the erosion of phylogenetic signal with time and incomplete lineage sorting are only a few of the many factors that may confound the reconstruction of the correct phylogenetic tree for a set of organisms or sequences. To avoid these and other pitfalls affecting phylogeny reconstruction, biologists have increasingly turned to phylogenomics, the inference of phylogenetic relationships using genome-scale data, to resolve recalcitrant relationships in the tree of life. This symposium gives a stage to the application of phylogenomics in phycology.