

Séminaire



Mardi 25 avril 2023 à 10h30

Amphithéâtre Henri Benoît

Claudia Bonfio

Laboratoire de biochimie supramoléculaire
ISIS Strasbourg

Shaping early life: primitive cells, primitive membranes

The complexity of modern biochemistry suggests that a systems biochemistry approach is required to understand and potentially recapitulate the network of prebiotic reactions that led to the emergence of life.

Early cells probably relied upon interconnected chemistries to link nucleic acids, peptide-based catalysts and membranes. In this context, I will discuss our recent advancements about:

- what, how and when membrane-based compartments appeared on early Earth;
- whether primitive membranes could be compatible with prebiotic chemistries and metal-driven catalytic processes;
- what biophysical or biochemical mechanisms could enable primitive cell cycles to retain continuity of function.

Addressing all these points can help us to elucidate the prebiotic pathways that led to the emergence of populations of functional primitive cells and, from there, the rise of life as we know it.

Les personnes souhaitant rencontrer C. Bonfio sont priées de prendre contact avec Antonio Stocco.