



O'É Gaillimh
NUI Galway

Microbiology External Seminar Series



Metabolomics of atmospheric life:

case study at the top of

Puy de Dôme



supported by MicroSoc



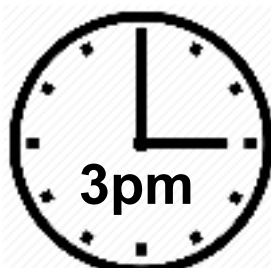
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Université Clermont Auvergne

Director, Platform for the Exploration of Metabolism (PFEM)

For more than 15 years, a multidisciplinary group has been investigating clouds and physicochemical disturbances at the top of the *Puy de Dôme* (Clermont-Ferrand, France). In this unique site (a volcanic mountain range at the center of France), we have access to clouds from diverse origins (marine, anthropic, desertic, etc.), which provides an ideal platform to perform analyses and record numerous data (ACTRIS and GAW networks).

Cloud water is one of the most precious of samples, as only a few hundreds millilitres are collected from each cloud, using cloud impactors, a sterile device capable of harvesting only cloud droplets. We have isolated microbial strains from atmospheric events and preserved >500 strains of cloud bacteria and fungi. We investigate the role of microbial life in clouds through the optimization of atmospheric models derived from metabolic information from bioaerosols. We first obtained clues on metabolic disturbances encountered under atmospheric conditions, and we have investigated the biodiversity of several clouds.

**Thursday,
7th
March
2019**



**Larmor
Lecture
Theatre,
Concourse**

followed by a reception at 4pm

ALL WELCOME