

# Research Unit Forest Dynamics - colloquium

**Date:** 27.02.2023

**Time:** 10:30

**Room:** Engler-Saal

**Duration:** 25 minutes

**Author:** Dr. Mark Anthony, Ambizione Fellow Ecosystems Ecology WSL, RG Ecosystem Ecology

**Title:** Soil microbiome diversity across Europe and implications for forest functioning

## **Abstract:**

Soil microbiomes are the most diverse communities on Earth and drivers of forest biogeochemical cycles. How taxonomic and phylogenetic variation in the microbiome varies with forest carbon cycling is among the least studied frontiers in forest ecology. In this seminar, I will show how the diversity and functional potential of forest microbiomes relates to forest tree growth and nutrition and soil carbon and nutrient cycling across hundreds of forest inventory plots distributed across sixteen European countries. These unique results show, for the first time, how different components of the microbial community are drivers and/or strong bioindicators of variation in forest biogeochemistry.