

# BayCEER Kolloquium

Lectures in Ecology and  
Environmental Research

Summer 2024



UNIVERSITÄT  
BAYREUTH

Donnerstag/Thursday

**18.04.2024**

**12:15 in H6, GEO**



**Dr. Dimitri Meier**

Ecological Microbiology, BayCEER

## **Survival, 'dormancy', and resuscitation of microorganisms in water-limited environments: insights from coastal salt flats and desert soil crusts**

One of the most fascinating features of microorganisms is their ability to survive extremely hostile conditions such as desiccation, UV radiation, hypersalinity, and prolonged periods of starvation. The term 'dormancy' is often used to describe the state of reduced metabolic activity in which microorganisms endure unfavourable conditions. Few specific microbial taxa are known to form dedicated resting stages, e.g. spores or cysts. However, physiological and metabolic strategies associated with 'dormancy' and survival can vary dramatically between different habitats and microbial species. For most microbial taxa abundant in natural ecosystems such survival mechanisms remain unknown. In arid regions, microbial activity in habitats like surface soils or tidal flats can suddenly become limited by one critical parameter – water availability. I will present two studies investigating the functional potential and activity of microorganisms inhabiting two water-limited surface environments, both exposed to high UV radiation and heat.



Bayreuth Center of Ecology  
and Environmental Research



**Bayceer**



Scan me!

The lectures are an interdisciplinary platform for students, junior and senior scientists.

Scan the QR code or visit our homepage for abstracts and further information:

[www.bayceer.uni-bayreuth.de/kolloquium/](http://www.bayceer.uni-bayreuth.de/kolloquium/)