



### 1. Title

Life in Soils – Distribution and Function of Soil Microorganisms in a Changing Environment

### 2. Type

Commission Symposium: Comm. 2.3-Soil Biology

### 3. Organizer(s) & Convener

Ellen Kandeler

University of Hohenheim, Institute of Soil Science and Land Evaluation, Soil Biology Section, Emil Wolff Str. 27, 70599 Stuttgart, Germany,

Tel: +49 711 4592 4200,

Fax: +49 4592 3117,

E-mail: kandeler@uni-hohenheim.de

Naoise Nunan

CNRS, BioEMCo, Campus Agro Paris Tech, 78850 Thiverval-Grignon, France

Tel: +33 (0)1.30.81.52.83

Fax: +33 1 30 81 54 97

E-mail: nunan@grignon.inra.fr

### 4. Rationale

Microbial ecology is still an emerging discipline in soil science in which the variation of microbial abundance and diversity over space and/or time is examined with a view to understanding how microbial functioning is regulated. It aims to shed light on the mechanisms through which microbial diversity emerges and is maintained, as well as understanding the role of microbial communities in regulation of biogeochemical cycling in different ecosystems.

### 5. Objectives

The objective of this symposium is to improve the understanding of multi-scale distribution and function of soil microorganisms. Of particular interest is how the spatial distribution of microorganisms affects microbial functioning in soil and how this modulates the microbial response to different environmental changes (e.g. soil management, climate change).

### 6. Description

This symposium will profit from interdisciplinary approaches applying new techniques to visualize and analyse soil microorganisms and their functions within their habitat. We also would like to stimulate discussions about scaling in order to better understand how local and regional microbial diversity are related and how these are related to biogeochemical cycles.

