**Session Proposal**

# Session Title

The Application of Machine Learning to Soil Morphology and Micromorphology

# Session Organizers

Richard J Heck, University of Guelph, Canada, rheck@uoguelph.ca, primary contact person

Fabio Terribile, Università di Napoli Federico II, Italy, fabio.terribile@unina.it

…

# Session Description

The application of digital imaging, especially 2D optical and 3D x-ray computed tomography, is well established and utilized for the characterization of soil morphology and micromorphology. The adaptation and application of digital image processing and classification tools, as well as morphometric and spatial analytical techniques, have allowed for quantification of soil morphology, allowing for more effective integration into numeric modelling of soil processes and behavior. As with other aspects of soil science, machine learning offers new potential for interpreting soil morphology at all scales. This is especially timely, considering on-going efforts to establish repositories of thin section and CT image collections. The session will focus on the development of relevant analytical techniques and interpretive strategies.

# Format

Oral presentations, with the usual alternative option for poster presentations.

# Proposed Speakers

***None at this time.***