



## **Master/bachelor thesis – Characterizing the spatial variation in soil physical properties of cropland**

### **Background**

The Land Atmosphere Feedback Observatory (LAFO) aims to characterize fluxes and feedbacks within and between soil, land cover and the lower atmosphere – using a novel synergy of energy balance/eddy covariance stations, vegetation measurements, and scanning lidar systems. A detailed characterization of the soil physical properties of the observation site is essential to run land surface and crop growth models. For investigating the spatial variations in soil physical properties, non-invasive geoelectrical methods are commonly used. Ground conductivity meters facilitate dense data collection and excellent spatial resolution. EM38 surveys will be used in the context of this thesis together with classical soil sample analysis to assess the spatial variation in soil physical properties at the Heidfeldhof.

### **Your tasks are**

- Geoelectrical measurements
- Collection and analysis of soil samples
- Visualization of results and discussion

### **What we expect**

- Studies in Agricultural or Environmental Sciences or comparable
- Very high interest in soil sciences
- Skills or familiarization with GIS software
- Driver's license
- Ability to work in a team, reliable, committed and very self-reliant way of working

**Start:** as soon as possible

### **Contact**

For questions about this position, please contact:

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