

Three PhD Positions in Bayesian Geophysical Inversion and Model Selection

The Applied and Environmental Geophysics Group at the University of Lausanne has openings for three PhD students working on:

- A. *Geophysical inversion with complex geological priors using deep learning and multiple-point statistics*
- B. *Accounting for petrophysical and upscaling errors in probabilistic and deterministic geophysical inversions*
- C. *Geophysics-based falsification and corroboration with emphasis on frozen ground dynamics in an alpine catchment*

The PhD positions are funded for four years and the starting date is September 1, 2019, or a slightly earlier or later date to be decided upon. Successful candidates should ideally hold MSc degrees in geophysics, physics, statistics, mathematics or quantitative Earth Sciences. He/she should have a keen interest and preferably some experience in Bayesian statistics, scientific computing, geophysical forward modeling and inversion. Field experience and knowledge about hydrogeological, critical zone or permafrost processes are beneficial for sub-project C. We are a dynamic international research group working on a wide variety of topics in environmental and computational geophysics. More details about the project and its project partners are provided here: <https://wp.unil.ch/linde-hydrogeophysics/geofaces/>

To apply, please send a cover letter clarifying your overall motivation for entering a PhD program together with your curriculum vitae and the names, telephone numbers, and e-mail addresses of two referees to Prof. Niklas Linde, Institute of Earth Sciences, Géopolis 3779, University of Lausanne, 1015 Lausanne, Switzerland or by e-mail to niklas.linde@unil.ch. The application deadline is May 15, 2019.