



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Ph.D. position in GPS seismology (m/f)

The Seismology and Geodynamics Group (www.seg.ethz.ch) of the Department of Earth Sciences at ETH Zurich invites applications for a highly motivated Ph.D. candidate in seismology/geodesy. Funded by the Swiss National Science Foundation (SNSF), the project “Seismology with GPS: Mapping the Earth’s interiors with geodetic observations” aims at creating a database of GPS waveforms that will be used in order to improve the reliability of global tomographic models of seismic wave speeds in the Earth's mantle at very long periods.

Tasks:

- Creation of a calibrated GPS waveform dataset
- Global wave propagation at very long periods with modern computational methods
- Computation of a seismic tomography model using long-period GPS waveforms

Qualifications:

- University degree (at least 4 years B.Sc. or M.Sc.) in geophysics, physics, mathematics, engineering, computer sciences or related fields
- Strong background in applied mathematics, (computational) seismology, numerical methods
- Strong capabilities for programming and handling large codes under various operating systems (Linux, Unix, OSX, high-performance computing clusters)
- Ability and willingness to work in an multidisciplinary team and to communicate with partners
- Very good command of the English language in spoken and written form

The project will be undertaken in collaboration with University of Paris 6 (France) and University of Oxford (UK), and co-supervised by Drs. N. Houlié, T. Nissen-Meyer, L. Boschi, Profs. D. Giardini and M. Rothacher. ETH Zurich offers a stimulating, vibrant and international research environment with world-class facilities and competitive salary. Zurich is consistently ranked as one of the most desirable cities to live and work worldwide.

Start date: as soon as possible; at the latest in spring 2013

Duration: 36 months with option for extension

Application procedure: Please send an email stating “GPS-SEISM” in the subject line to nhoulie@ethz.ch, and enclose pdf documents containing curriculum vitae, contact details of 2 referees, potential publications, and a statement of research interests. Evaluation will begin two weeks after the announcement of the position and continues until the position is filled. ETH Zurich is an equal opportunity employer.

Contact and further questions: Dr. N. Houlié: nhoulie@ethz.ch