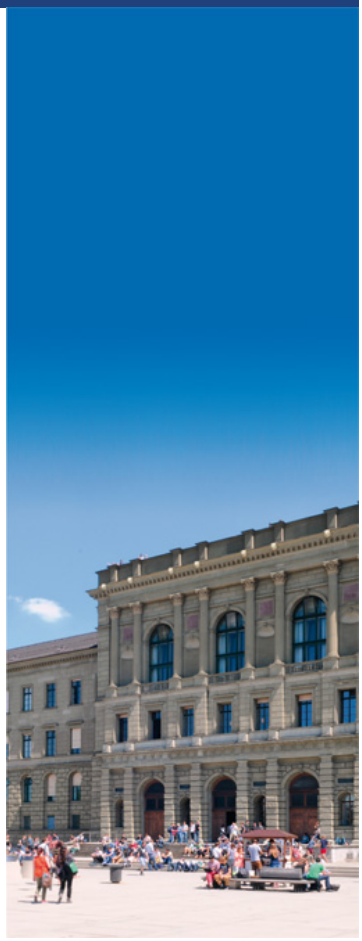
ETH zürich

ETH Zurich is one of the world's leading universities specialising in science and technology. It is renowned for its excellent education, its cutting-edge fundamental research and its efforts to put new knowledge and innovations directly into practice. The observation, causes and impacts of earthquakes are the core focus of the research activities of the Professorship for Seismology and the **Swiss Seismological Service (SED)** at ETH Zurich.



PostDoctoral reserach position in seismology (80-100%)

We are looking for a researcher with an interest in developing and applying sophisticated approaches for detection, accurate location, and source characterization of seismicity in Switzerland and other regions. The successful candidate will also improve the capabilities of the seismic network to monitor such seismicity in real-time applications and extend existing databases by additional seismotectonic information.
The primary responsibilities for the postdoctoral researcher are to: 1) Develop new approaches for accurate focal depth determination of shallow earthquakes using e.g. waveform modelling and analysis of secondary phases. 2) Application of cross-correlation based detection methods to improve detection thresholds and source classification of micro-seismicity in Switzerland, including comparison with existing micro-earthquake catalogs. 3) Relative relocation of augmented catalogs. Test and implementation of real-time algorithms and extend existing databases. 4) Develop and apply new approaches for seismic source studies.

The position is initially for 3 years, with the possibility of extension. He or she will work in a highly collaborative environment, with close links also to industry partners. The candidate will also join the team routinely monitoring Swiss seismicity. The working language of the group is English, though knowledge of German or French would be regarded positively.

You should have a PhD in geoscience or a related field with documented experience on relevant subjects, which may include source location, quantification and characterization, waveform modelling, ray-tracing, seismic tomography, software development for seismic networks, and data mining. A solid background in programming, preferably in Python, is required. Experience and / or familiarity with the SeisComP3 monitoring system are not necessary but would be of advantage.

We look forward to receiving your online application including CV, including a list of publication and a letter of motivation. Please note that we exclusively accept applications submitted through our online application portal. Applications via email or postal services will not be considered.

For further information about the Swiss Seismological Service please visit our website: www.seismo.ethz.ch. Questions regarding the position should be directed to Dr. Tobias Diehl by email: tobias.diehl@sed.ethz.ch (no applications).

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