

PhD position available: **Numerical investigation of the impact of fluids on the earthquake cycle**

We are looking for a highly motivated, ambitious and independent student to investigate interactions between fluid flow and earthquakes in the upper crust. The PhD candidate will develop physically-based mathematical models of coupled fluid flow and deformation and use them to perform numerical experiments at time scales spanning seconds to thousands of years.

The project is fully funded by the Swiss National Science Foundation and has a maximum duration of 4 years. The student will be based within the Department of Earth Science at the University of Geneva and will be supervised by Dr. Guy Simpson.

The successful candidate must have an MSc in Earth Science, Physics, Applied Mathematics or Engineering. Candidates with a background in fault and fluid mechanics, rock physics, geophysics and/or (geo)mechanical and fluid flow modelling are especially encouraged to apply. Experience with programming (e.g., Matlab, Fortran, C) and numerical methods is a major advantage. Candidates are expected to have strong written and spoken English. Candidates will also be required to assist with teaching of graduate or undergraduate classes.

Interested applicants should send one merged pdf document containing a CV, their academic record, a short letter of motivation (max. 1 A4 page) and the names and contact details of two potential referees to:

Guy Simpson  
Guy.Simpson@unige.ch  
Department of Earth Sciences  
University of Geneva  
Rue des Maraîchers 13, CH-1205 Geneva, Switzerland

Applications will be accepted until **June 1, 2019**. The intended starting date is **September 1, 2019**, or as soon as possible thereafter.