

The Helmholtz graduate research school **GeoSim** (*Explorative Simulation in Earth-Sciences*) is a collaborative effort of researchers in departments of Earth and Mathematical Sciences at the German Research Centre for Geosciences (GFZ Potsdam), Potsdam University and FU Berlin. Currently, 39 PhD students from 11 countries and 3 continents are enrolled. We invite applications for an additional

8 PhD fellowships

in the field of simulation of Earth System processes.

GeoSim researchers use numerical and physical simulation as an explorative tool for advancing our qualitative and quantitative understanding of Earth's complex systems in the fields of hydrological flow and transport processes, solid earth dynamics and earthquakes, and atmosphere-hydrosphere dynamics and climate. Methods include data exploration and assimilation, analysis of scaling properties of geo-processes, computer-aided modelling of incompletely known systems. We aim to train a new generation of young, interdisciplinary scientists with skills in combining applied geosciences with the development of physical concepts of Earth systems, mathematical abstraction, and the use of high-performance computing.

What we offer:

Training includes advanced courses in the above subjects, summer schools, and workshops complementing the research work in the topic of the PhD thesis. Candidates will be co-supervised by an earth scientist and a mathematician and benefit from a stimulating interdisciplinary research environment. The three-year PhD fellowships amount 1500 euro/month (tax free).

What we ask:

We expect candidates to contribute to the development of their own research topic and to participate in the school's curriculum. At the time of appointment, candidates should have a MSc degree (or equivalent) in at least one of the following fields as well as a strong affinity with a complementary discipline: Earth Sciences (solid earth science, hydrology, atmospheric science, meteorology, climatology), Mathematics, Physics, Chemistry and Software Engineering.

The website <http://www.geo-x.net/geosim> provides more information on candidate requirements and the online application procedure, on the groups and scientists involved in GeoSim, potential thesis subjects and the PhD curriculum.

Candidate evaluation will begin after the application deadline on October 20th, 2013; the anticipated start of the PhD projects is on April 1st, 2014. GFZ, Potsdam University and Freie Universität Berlin are equal opportunity / affirmative action employers.

Prof. Dr. O. Oncken (GFZ Potsdam)
Prof. Dr. F. Scherbaum (Potsdam University)

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