



Big Data within Geo.X. Geo.X is a strategic partnership of university and non-university institutions in the metropolitan region of Berlin and Potsdam spanning the whole range of geoscientific disciplines; from planetary science, space-borne Earth observation, through atmosphere studies, to material science, Earth system dynamics and the deep biosphere. Geo.X has broken new ground by interfacing geoscience data with novel technologies to manage, analyse and explore these big data resources. With this call we seek strongly quantitative geoscientists or data scientists with interest in geoscientific questions to further integrate these research fields.

Focus on Data Science. Further building the Geo.X Young Academy we invite applications for

16 Young Academy positions: Topic “Geo.Data Science” (3-year PhD or 2-year Post-Doc positions)

This is a joint call with our second topic “Geo.Society”. The 16 positions will be filled with the top applicants from both fields. If applicants can connect with Geo.Data Science as well as Geo.Society this will be an asset.

Our Vision. We aim to train a new generation of young scientists capable of conversing and collaborating across disciplinary boundaries. Each application has to include a short research proposal at the intersection of geoscience and data science. The data science methods should range around **uncertainty quantification, mathematical multiscale analysis, predictive and explorative simulations, computational and high-dimensional statistics, data integration, data profiling, heterogeneous data sources or machine learning**. We expect candidates to describe their own research ideas within this framework, highlighting the interdisciplinary innovation provided for at least one of the Geo.X key research fields Planetary Geodynamics, Natural Hazards and Risks, Natural Resources and Energy Raw Materials, Geo-Bio-Interactions, and Human Habitat and Sustainability.

Interdisciplinary Young Academy. With our interdisciplinary Young Academy, we offer a vibrant research environment that covers inter-institutional collaborations, interdisciplinary supervision, specialized training courses (e.g. summer schools, workshops and peer-organized seminars) and soft skills training. We provide young scientists the opportunity to further develop their research results, making them available to the public and private sectors and to society at large. Our travel support program will ease rapid integration into the international research community.

Applicants. PhD candidates should have strong skills in geoscience, mathematics or computer science, proven by a MSc degree or equivalent. A clear affinity to data-driven and interdisciplinary research is mandatory. Post-Docs must hold a PhD degree on a relevant topic, possess interdisciplinary experience (e.g. proven by previous projects) and demonstrate an independent research program. We highly encourage female candidates to apply.

The website <http://www.geo-x.net/young-academy/> provides more information on

- the scientific framework of this call
- candidate requirements and online application procedure
- payment scheme for both PhDs and Post-Doc positions

Candidate evaluation will begin after the **application deadline on April 29th 2019**; with an anticipated start of projects on September 1st 2019. Employment will take place according to the individual conditions of the institution employing the selected candidate. All institutions are equal opportunity / affirmative action employers.

