



The **Rheinische Friedrich-Wilhelms-Universität Bonn** is an international research university that offers a wide range of degree programs. With 200 years of history, about 33,000 students, over 6.000 employees, and an excellent domestic and international reputation, Bonn University is among Germany's leading universities. It was awarded the status of a University of Excellence in 2019.

Starting at the **earliest date possible** and preliminarily **limited to a fixed contract of three years**, the **Astronomical, Physical and Mathematical Geodesy** Group within the Institute of Geodesy and Geoinformation is seeking a

## Doctoral Fellow (100%)

The position has been opened in the framework of the DFG-funded project "Exploitation of SWOT for coastal and freshwater dynamics application (COSWOT)".

This project will evaluate the benefits of water level measurements from the Surface Water and Ocean Topography (SWOT) mission in three coastal regions of interest which are Baltic Sea, Indonesia and Bay of Bengal. SWOT is a new and highly innovative mission with potential to improve the understanding of small-scale ocean processes and their role in coastal and inland flooding. The coastal-estuary-rivers continuum, where data from SWOT are of most value, is a challenging environment for the SWOT's across-track interferometer instrument.

The successful candidate is expected to develop methods to evaluate the SWOT and nadir-altimeters satellite mission and to investigate small-scale processes in the transition zone from land to sea. The candidate's first aim will be to understand the novel SWOT observations. Its second aim will be to study the mesoscale and sub-mesoscale structures corresponding to coastal currents, fronts and mixed layer instabilities, estuary plumes, river runoff and river discharge. The candidate will work in a highly stimulating international environment. An international network of collaborators has been established and short exchanges and visits planned.

Your qualifications:

- University degree in Geodesy, Physical Oceanography, Meteorology, Mathematics, Physics or related field
- experience in data analysis, statistics and machine learning
- good level in programming python (required), matlab and c++
- unix working environment, preferably knowledge of HPC
- good level of English in speaking and writing
- team player
- rigor in analysis, curiosity, self-initiative, independent work, innovative

We offer:

- a varied and challenging position with one of the biggest employers in the area
- participation in the university-wide pension system (VBL)
- access to the extensive university sports program
- an excellent transport infrastructure due to the central location in Bonn and the possibility to use assigned, affordable parking
- a salary based on the 13 TV-L scale

**The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. It aims to increase the proportion of women in areas where women are under-represented and to promote their careers in particular. It therefore urges women with relevant qualifications to apply. Applications will be handled in accordance with the Landesgleichstellungsgesetz (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome.**

Inquiries and **applications** (CV, letter of motivation, list of publications and similar activities, certificates, expected availability date, and recommendation letter(s) and/or reference contacts) should be sent by **30 April 2024** to PD Luciana Fenoglio, University of Bonn, Institute of Geodesy and Geoinformation ([fenoglio@uni-bonn.de](mailto:fenoglio@uni-bonn.de)) with the **application code 3.2/2024/24**. Before sending your application, please combine and convert all of your documents into **one PDF file**.