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**UNIVERSITÄT  
BERN**

Astronomisches Institut, Sidlerstrasse 5, CH-3012 Bern

Philosophisch-  
naturwissenschaftliche Fakultät

**Astronomisches Institut**  
Bern, 1. August 2019

## Open Position at the Astronomical Institute of the University of Bern

The Astronomical Institute of the University of Bern (AIUB) is partner of the project

### Global Gravity-based Groundwater Product (G3P)

that has been granted to the German Research Centre for Geosciences (GFZ) in response to the Earth Observation Call EO-4-2019 of the Horizon 2020 European Union Framework Programme for Research and Innovation. In the frame of the G3P project funding will be available at AIUB for a

### RESEARCH ASSISTANT

G3P is a collaborative effort between twelve European institutions that will be coordinated at GFZ. The key objectives of the G3P project are: 1) to process and make accessible the latest satellite gravity data as water storage products, in particular from the recently launched GRACE-FO mission, 2) to set-up the groundwater product as a new cross-cutting application of the existing product portfolio of three Copernicus core services, and 3) to advance existing Copernicus service products to match the requirements for the groundwater application developed within the G3P project.

AIUB will be one of the GRACE/GRACE-FO analysis centers (ACs) of the G3P project and will act as the gravity combination center to derive best possible gravity field solutions from all G3P ACs by combination. The tasks of the Research Assistant at AIUB will focus on the computation of gravity field solutions using the standard Level-1B data from the Jet Propulsion Laboratory (JPL) as well as alternative Level-1B data from G3P using the AIUB's in-house developed Celestial Mechanics Approach. The combination of the gravity field solutions will be performed in collaboration with the Combination Service of Time-variable Gravity Fields (COST-G) of IAG's International Gravity Field Service (IGFS). The Research Assistant will develop new strategies to explore the full potential of joint combinations of all Level-1B instrument data (K-Band, LRI) of GRACE-FO, as well as Satellite Laser Ranging (SLR) data for low degree SH coefficients.



### Education:

The candidate is expected to have successfully completed a Ph.D. thesis in astronomy, geodesy, physics, or a related topic. Experience in global gravity field determination from GRACE/GRACE-FO data, or using the Bernese GNSS Software package, and in computer science (coding in Fortran90, C++, or perl) are not a requirement, but an advantage. The candidate should speak and write English fluently.

The candidate should start working in Bern on January 03, 2020.

The project is scheduled for three years. The salary follows the guidelines of the University of Bern and depends on the qualification of the successful candidate.

### Application:

Applications (including CV, university diploma copies, record of study, possible references) should be received no later than September 10, 2019 at the following address:

Prof. Dr. Adrian Jäggi  
Astronomical Institute  
University of Bern  
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Informal inquiries may be obtained at the above address as well.

The University of Bern is an equal opportunity employer and encourages in particular women to apply for open positions.