

The Research Facility Satellite Geodesy of the Technical University of Munich offers a scientist position fixed-termed to 2 years at the Geodetic Observatory Wettzell, Bad Kötzing, Germany for the “Horizon 2020”-project “Jumping JIVE”

**Master (M.Sc./M.Eng.)
(Technical) Informatics/Computer Science/
Mechatronics/Electrical Engineering**
(depending on professional experience offering EG 13 TVL)

Job description:

- Conducting of a study to compare popular system monitoring software which is used in the field of operating of radio telescopes
- Planning of structures to prepare the monitoring of large telescope arrays
- Integration of existing data acquisition software in a centralized, interoperable infrastructure with centers at the Geodetic Observatory Wettzell and at JIVE in Dwingeloo, The Netherlands
- Implementation of web-based access mechanisms to present status information of telescope arrays and to download data sequences for analysis
- Scientific evaluation and rating of performance and quality of the integrated monitoring using real user scenarios including the Wettzell observatory, JIVE, and the Onsala observatory in Sweden
- Support, enhancement, and further implementation of the monitoring suite SysMon developed at Wettzell observatory
- Implementation of interfaces between different software packages for data acquisition, monitoring, and visualization
- International presentation of design ideas and working results at workshops, with publications and during project meetings

Requirements:

- Master’s degree (M.Sc./M.Eng.) in (Technical) Informatics, Computer Science, Mechatronics, Electrical Engineering or equivalent
- Knowledge in operating of system status monitoring for complex facilities
- Knowledge in monitoring infrastructures, e.g. Nagios or Zabbix, is advantageous
- Experience and knowledge in current software tools
- Linux know how in theory and practical use is mandatory
- Programming skills and experiences with the programming languages C and C++ is mandatory
- Basic skills with database management systems (especially with PostgreSQL) is advantageous
- Experiences and knowledge in geodetic VLBI and/or astronomical radio interferometry is very welcome
- Responsible use of complex scientific instrumentation is important
- Social skills, like capacity for teamwork in interdisciplinary and international teams and an ability to goal-oriented organization of the own work is highly requested
- Ability to talk and write in German language is very welcome for internal correspondence and internal project documentation

- Ability to talk and write in English language to participate in international workshops, project meetings, and for project documentation together with other EU partner institutions
- Communication competence and a proactive own initiative
- Certificate of good conduct without negative entries is required (can be submitted later)

We offer:

- First steps in a scientific project (funded from the European Union's Horizon 2020 research and innovation program) with international contacts and the possibility for publications
- A challenging work with a high degree of own responsibility in a small team consisting of engineers and scientists
- An income according to the salary group (EG) 13 of the TVL (land Bavaria)
- International contacts and participation in world-wide workshops
- Family-friendly and flexible working times
- Relocation allowance, if necessary

The Technical University of Munich seeks to increase the number of female employees, i.e. qualified female candidates are explicitly encouraged to apply for this position. Severely disabled candidates will be preferred if they are essentially similarly qualified and suitable for the position. A minimum of physical ability is required.

Further information about the Technical University of Munich can be found here: <http://www.tum.de>. Details about the Research Facility Satellite Geodesy can be found here: <http://www.iapg.bgu.tum.de/>

Are you interested?

We would appreciate your application containing comprehensive and complete application documents till March 12th, 2017. Please send your documents to:

Technische Universität München
Forschungseinrichtung Satellitengeodäsie
c/o Univ.-Prof. Dr.phil.nat. Urs Hugentobler
Arcisstr. 21
80333 München

You can also send your documents by email to fesg@bv.tum.de