IWF Graz. Leading Austria into Space. Since 1971

The Space Research Institute (IWF) with about 100 employees from twenty nations, is one of the largest institutes of the Austrian Academy of Sciences (OeAW). The institute is located in the Victor Franz Hess Research Center of the OeAW in Graz and hosts eight research groups on the astrophysics of the solar system, exoplanets, and space instrumentation. The IWF also operates a world-leading satellite laser ranging station at the Lustbühel Observatory.

Postdoc (f/m/x) in Satellite Laser Ranging

Job ID: IWF053PD126

The candidate will join the SLR group and will investigate data analysis and automation techniques with special emphasis on the usage of Machine Learning (ML). The results are an input for orbit determination, prediction and characterization of satellites and space debris while improving station performance and precision.

Besides SLR measurements, the group performs space debris laser ranging (SDLR) and single photon light curves (LC) measurements, characterizing sunlight reflections of space objects. The IWF can thereby rely on historical data dating back more than 20 years. Special emphasis of the candidate will be put on the utilization of machine learning related to new observation technologies (e.g. MHz laser ranging), the combined usage of data from different observation sources (data fusion) and the modernization of the SLR station. The candidate with work in close cooperation with IWF's machine learning experts.

Your Tasks

- Analysis and post-processing of SLR, SDLR and LC data as an input for orbit determination
- Utilization and improvement of existing orbit determination tools for SLR and SDLR data
- Utilization of ML for novel processing techniques, station improvement and orbit determination
- Automation approaches for post-processing, real-time observations, observation tasking
- Scientific publications in peer-reviewed journals

Your Profile

- The applicant must hold a PhD in Physics, Satellite Geodesy, Computer Science or closely related fields
- Software development and programming expertise (Python and/or C++)
- Experience in data analysis of large datasets, background in machine learning
- Experience in scientific publishing

Our Offer

The appointment is planned to start earliest July 1st, 2026. The post will be for 3 years initially but can be extended up to 6 years, subject to the availability of funding. We offer an annual gross salary of € 70.167,44 according to the collective agreement of the Austrian Academy of Sciences. Included are social benefits and health insurance.

Application must include a cover letter, curriculum vitae, a list of publications, certificates for full academic record, a statement on past research experience (max. 2 pages), a statement on how to link the candidates experience to the institute's research (1 page), and two letters of recommendation. Applications should be sent in a single PDF file. The closing date of applications is **June 30th, 2026**. For inquiries, contact Dr. Michael Steindorfer.

APPLY NOW

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply. The OeAW cooperates with NEBA and is a member of MyAbility in order to provide appropriate workplace structures, in particular for persons with disabilities.

Contact

Michael Steindorfer | michael.steindorfer@oeaw.ac.at
IWF | 8010 Graz, Austria
Österreichische Akademie der Wissenschaften | Austrian Academy of Sciences | https://www.oeaw.ac.at/