The Max Planck Institute for Gravitational Physics (Albert Einstein Institute, or AEI) is the largest research institute in the world specializing in Einstein´s legacy: general relativity and beyond. The AEI has five departments, three research groups about 300 international scientists, students and staff members based at two locations: in Potsdam-Golm and on the campus of the Leibniz University Hanover. Our new director is searching for an experienced

The Max Planck Institute for Gravitational Physics (Albert Einstein Institute) invites applications for the position of an

Embedded System Developer (m/f/d)
"Scientific Instrumentation for Space Applications"

The applicant will join to a multi-disciplinary team at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute). The AEI is a world-leading research center specializing in gravity, gravitational waves and precision laser interferometry. The institute has locations in Potsdam and in Hannover. For our location in Hannover, the "Laser Interferometry in Space" group focuses on Gravitational Wave Detection and Earth Gravity Field Observation. More information can be found at https://www.aei.mpg.de/interferometry-in-space.

The "Laser Interferometry in Space" group has a significant record of outstanding contributions to the success of the LISA Pathfinder and the GRACE Follow-On missions. Currently, the AEI group is involved in the development of digital signal processing units in the European context for the Next Generation Gravity Mission (NGGM) and for the LISA (Laser Interferometer Space Antenna) mission.

The AEI is involved together with space agencies and industry partners in the design, construction and testing of Engineering Models for the Phase Readout Electronics as core sub-systems of the NGGM and LISA missions.

Your responsibilities

We are seeking an embedded system engineer with proven experience in FPGA programming to support our science team and engineers at the forefront of novel realizations. The successful candidate will support us in the development of FPGA designs for the Phase Readout Instrument, with special focus on data handling and interfaces (FPGAs, Microprocessors, Memory Control and Peripherals). The applicant will strengthen the team of physicists and coordinate with scientists the verification of the instrument in the test campaigns.

Your profile

A successfully completed university degree (diploma, master) and proven experience as an embedded system engineer is a prerequisite for the application. A PhD degree in physics, electronics, software engineering, or in a comparable field is beneficial.

Furthermore, the ideal candidate will have experience with:

- Design and development of firmware/synthesisable logic in VHDL
- Software development using C/C++/Python, etc. for failure-critical environments as in auto-motive, medical or aero-space sectors
- Tracing the software realization during the life cycle of the instrument (design, implementation, verification, HW integration, maintenance)
- Documentation of software projects and release control using git
- Knowledge of space engineering
- Good communication skills and good command of English
- Teaching and transferring knowledge to researchers/software developers
- Efficiently and cooperatively working in a multi-disciplinary team

We offer

Work in an international research environment benefitting from regular interactions with a dedicated project team, as well as the opportunity to benefit from the wide range of expertise at the Albert Einstein Institute.

- Close collaboration with leading international partners in science, industry and space agencies
- Full time position with competitive salary according to the pay scale of public services in Germany for Scientists, fully integrated in comprehensive German social security scheme (health insurance, unemployment insurance etc.). Part-time employment can be arranged on request
- Initial appointment will be for 2 years at the earliest possible date
- Access to world-class laboratories, workshops and computing facilities
- Opportunity to participate in our multidisciplinary lectures as well as transferable skills seminars

Your application

Please **register** an account in our job portal and submit your application including the curriculum vitae, letter of motivation, letter(s) of recommendation and university diplomas by **December 6th, 2021** in electronic form (preferably as a single PDF-file). In case of problems with the application form, please contact **jobs@aei.mpg.de**.

The Max Planck Institute for Gravitational Physics is an equal opportunity employer, and is committed to providing employment opportunities to all qualified applicants without regard to religion, race, age, disability, national origin or gender identity. The AEI and the Max Planck Society welcome individuals with diverse backgrounds, experiences, and ideas who embrace and value diversity and inclusivity (**Code of Conduct**).

For further information please contact Dr.-Ing. Juan José Esteban Delgado: **juan.jose.esteban@aei.mpg.de**.

Further information about data privacy at: **www.aei.mpg.de/515110/privacy-policy**

Max-Planck-Institute for Gravitational Physics (Albert Einstein Institute)
Am Muehlenberg 1, 14476 Potsdam-Golm, Germany

www.aei.mpg.de