For our location in Hamburg we are seeking:

**Laser Scientists for Ultrafast Nonlinear Optics and Timing**

**DESY**

DESY is one of the world’s leading research centres for photon science, particle and astroparticle physics as well as accelerator physics. More than 2400 employees work at our two locations Hamburg and Zeuthen in science, technology and administration.

DESY’s laser science and technology group is responsible for research, development and operations of high power femtosecond and picosecond lasers related to particle accelerators and free electron lasers (FEL). DESY will be upgrading its XUV FEL facility FLASH. Ultrafast laser technology is one of the key enabling technologies for this upgrade program. It is needed both for generation and manipulation of tailored electron bunches in advanced FEL modes, such as FEL seeding and for advanced ultrafast laser - FEL XUV pump-probe experiments with wide wavelength flexibility and few femtosecond time resolution. For a R&D program to advance ultrafast laser technology required for the future FLASH XUV FEL facility, we are seeking self-driven highly motivated laser scientists.

**The position**

- Advance ultrafast laser source technology for electron beam manipulation and pump-probe experiments at the FLASH FEL facility
- Research and Development in one of the fields: High repetition rate OPCPA technology, versatile nonlinear frequency conversion schemes to span the spectral range from VUV to THz in pump-probe experiments FEL-to-laser timing stabilization and diagnostics, energy scaling of high repetition rate, burst mode Yb-YAG pump laser technology and novel spectral broadening and pulse compression schemes for multi mJ picosecond near-infrared pulses
- Contribute to the technical design report of DESY’s XUV FEL upgrade

**Requirements**

- Ph.D. or Dr. degree in physics, electrical engineering or equivalent qualification
- Excellent knowledge of ultrafast laser technology and nonlinear optics
- Proven scientific track record in ultrafast optics

For further information please contact Dr. Ingmar Hartl (ingmar.hartl@desy.de).

The position is limited to 2 years, with the option of extension. Salary and benefits are commensurate with those of public service organisations in Germany. Classification is based upon qualifications and assigned duties. Handicapped persons will be given preference to other equally qualified applicants. DESY operates flexible work schemes. DESY is an equal opportunity, affirmative action employer and encourages applications from women. Vacant positions at DESY are in general open to part-time work. During each application procedure DESY will assess whether the post can be filled with part-time employees.

We are looking forward to your application via our application system: [www.desy.de/onlineapplication](http://www.desy.de/onlineapplication)

**Deutsches Elektronen-Synchrotron DESY**

Human Resources Department | Code: FSMA067/2019
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[http://www.desy.de/career](http://www.desy.de/career)

Deadline for applications: 2019/10/13

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**HELMHOLTZ RESEARCH FOR GRAND CHALLENGES**