



Deutsches Elektronen-Synchrotron, Germany

PhD Student Positions in Accelerator R&D

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.

Accelerator Research and Development (ARD) is a core mission of the lab. By further developing and inventing technologies for improving existing accelerator facilities and for constructing new ones, the ARD group gathers indeed accelerator building expertise to stay at the leading edge of accelerator science.

The position

Doctoral students are invited to take an active role in one of the following research topics at DESY's Accelerator R&D:

- Improvements of existing accelerator flagship facilities, e.g. upgrades to DESY's synchrotron radiation facilities, seeding of free-electron lasers, atto- and femto-second electron and photon beams
- Super-conducting RF technology for future accelerators and its implementation in FLASH, the European XFEL and other modern high power accelerators
- Compact accelerator technology with high accelerating fields, e.g. plasma accelerators, dielectric structures, beam or laser drivers for accelerators, cost-efficient technologies
- New accelerator facilities for R&D, photon science and particle physics, e.g. future free-electron lasers (XFEL upgrades, PETRA IV), the SINBAD facility at DESY, future colliders (e.g. FCC at CERN)

Requirements

- Doctoral students in the fields of physics or engineering may stay enrolled in their home university or enroll at the University of Hamburg or the Technical University Hamburg-Harburg (acceptance criteria must be met)

DESY-Doctoral programme is awarded for a duration of at least 3 years.

Do not hesitate to contact us at DESY Accelerator R&D to get additional information on the current research activities. Further information is available here: <http://ard.desy.de/e206405>.

Please arrange for two letters of reference.

Salary and benefits are commensurate with those of public service organizations 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: <http://www.desy.de/career>



Internship at DESY

DESY offers at both research locations in Hamburg and Zeuthen the possibility to carry out internships of several weeks in the fields of research, information technology (IT), mechanics, electrical engineering, electronics and administration.

 **Questionnaire internship proactive applications (482KB)**

Internship proactive application

[How do I apply?](#)

Interested person can apply for the advertised internships via the online portal. If the desired area or group does not have an online advertisement at the moment, please send us your application documents with details of the desired area or group to praktikanten@desy.de and we will check individually whether an internship is currently possible.

As internships are limited and supervision must be provided for the desired period, applications should be submitted at least 6 months (earliest 8 months) before the start of the internship.

[Required application documents and information for a proactive application](#)

Letter of motivation stating the kind of internship and any existing knowledge or skills

- **Computer skills**
- **Knowledge of the operating systems OSX, Linux or Windows**
- **Knowledge of foreign languages**
- **Other special skills or knowledge**

Specification of the desired period

Indication of the field of interest (max. 3):

- | | |
|---|---------------------------------|
| – Astrophysics (only in Zeuthen) | – IT/Computing |
| – Electrical Engineering | – Physics |
| – Industrial Mechanics | – Vacuum Technology |
| – Mechatronics | – Construction Mechanics |
| – Technical Product Designer | – Electronics Production |
| – Business Internship | – Library/Documentation |
| – Electronics Development | – Precision Mechanics |

Name of a person at DESY with whom an agreement may have been made about an internship at DESY

Curriculum Vitae

Students: matriculation certificate

Compulsory internships: School requirements or the university regulations for a compulsory internship

Current certificate

Questionnaire internship proactive applications (**necessary**)

You can find our current internship advertisements here: www.desy.de/career/job_offers

DESY would like to significantly increase the participation of women in the scientific-technical field and therefore requests girls to apply for the positions to be filled.

We look forward to receiving your application via our application portal:

www.desy.de/onlineapplication