



PHOTO INJECTOR.

DESY, Zeuthen location, is seeking: Postdoc (f/m) for PITZ in Zeuthen

DESY

DESY is one of the world's leading research centres for photon science, particle and astroparticle physics as well as accelerator physics.

The Photo Injector Test Facility PITZ in Zeuthen (near Berlin) develops high brightness electron sources for Free Electron Lasers (FELs) like FLASH and the European XFEL. To enable future continuous wave (CW) operation of FLASH and XFEL, suitable CW high brightness electron sources need to be developed. At PITZ a normal conducting CW gun will be designed.

The position

- RF design of a CW normal conducting electron source, including gun and buncher cavity, such as 2D and 3D RF simulation and optimization, multipacting analysis, high order mode analysis, coupler design and coupler kick analysis
- CW photo injector beam dynamics optimization based on the above gun and buncher for driving a CW XFEL and iteration with the RF design
- Support engineering design of both cavities by thermal and mechanical stress analysis, machining and assembly error analysis, and iteration with the mechanical design engineer
- Support the SRF gun development at DESY by e.g. providing RF analysis and beam dynamics simulations
- Document the designing process, such as writing technical notes, design reports, and conference and journal papers
- Participate in the shift operation of PITZ for accelerator R&D

Requirements

- PhD degree in physics or engineering
- Knowledge of microwave technology and accelerator physics
- Experience in high power RF cavity design, RF measurements, beam dynamics simulations and photo injector operations are of advantage
- Good knowledge of English is required

For further information please contact Dr. Houjun Qian, +49-33762-7-7191 (houjun.qian@desy.de).

Screening of applications will begin on 10.04.2017 and continue until the position is filled.

The position is limited to 3 years.

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 quoting the reference code preferably via our electronic application System: Online-Application

Deutsches Elektronen-Synchrotron DESY

Human Resources Department | Code: MPO002/2017

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Deadline for applications: Until the position is filled.

www.desy.de