



PHOTO INJECTOR.

DESY, Zeuthen location, is seeking: PhD student (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. An essential tool for time-resolved diagnostics and optimization of the electron beam is a transverse deflecting RF structure (TDS), under commissioning at PITZ since 2015.

The position

- Characterize and optimize high brightness electron beams using a TDS, and exploiting the outstanding flexibility of electron bunch shapes that can be generated at PITZ
- Analyze temporally resolved beam parameters along the electron bunch, e.g. slice emittance and slice energy spread
- Perform numerical simulations to improve the understanding of space charge effects on slice measurements
- Develop software to facilitate and standardize slice measurement techniques
- Participate in the shift operation of PITZ for accelerator R&D

Requirements

- University degree in physics or engineering
- Knowledge of accelerator physics and accelerator techniques
- Basic experience in beam dynamics simulations and numerical methods is required
- Programming experience, especially in Matlab, is of advantage.
- Good knowledge of English is required and knowledge of German is of advantage

For further information please contact Dr. Anne Oppelt, +49-33762-7-7527 (anne.oppelt@desy.de).

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. DESY operates flexible work schemes. Handicapped persons will be given preference to other equally qualified applicants. DESY is an equal opportunity, affirmative action employer and encourages applications from women.

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: MDO005/2016

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Deadline for applications: 5 January 2017

www.desy.de