Call for 2016 DESY-ONACPR Fellowship Applicants

## **Research Laboratory: DESY (*Please reference to DESY-ONACPR-2016-13*)**

### Division/Group: FH / FLA

### Supervising scientist: Dr. Jens Osterhoff Email/Phone: [jens.osterhoff@desy.de](mailto:jens.osterhoff@desy.de) / -1854

### Research Field: *Plasma wakefield acceleration*

**Position:** Postdoctoral Researcher in Advanced Acceleration Concepts

The research will be performed in the area of beam-driven plasma accelerators. A high current particle beam can drive a plasma wakefield with ultra-high gradients enabling compact acceleration. In addition to the accelerating fields, the plasma supports strong focusing fields. These transverse fields can focus the beam to extremely high densities, much greater than the background plasma density, resulting in ion motion on the time scale of the beam duration. The postdoctoral researcher will investigate the effects of ion motion on the dynamics of the beam and design and conduct an experiment to measure these effects on the FLASHForward Facility.

**Research Area:**

**Specific Requirements:**

The postdoctoral researcher should have a PhD in physics or related field, some knowledge of advanced acceleration concepts and plasma-based accelerators, and familiarity with computation techniques in plasma physics and numerical modelling of charged particle beams.

**Work Place:** Hamburg, Germany

**Earliest Start:** December 2016

**Language Requirement:** Sufficient command of the English language is mandatory

**Further Remarks:** This project will be executed in close collaboration with Dr. Carl Schroeder of Lawrence Berkeley National Laboratory, United States. Therefore, a willingness to travel to Berkeley for a limited number of weeks per year is required.