Call for 2015 DESY-ONACPR Fellowship Applicants

## **Code : DESY/2015/14**

## **Research Laboratory: DESY**

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### Division/Group: FH/T

### Supervising scientist: Jürgen Reuter - Email/Phone: juergen.reuter@desy.de +49 40 8998 3895

### Research Field: *Theoretical Particle Physics*

**Position:** Postdoctoral Research in Theoretical Particle Physics

**Research Area:**

The candidate is expected to work in the field of Theoretical Particle Physics, particularly phenomenology and collider physics. The focus of her/his research should lie in the determination of the physics potential of future linear and circular lepton and hadron colliders. Especially the precision calculation and simulation of Standard Model backgrounds as well as the development and enhancement of tools to elucidate the potential for New Physics searches at future colliders should be covered. In particular, new techniques for precision predictions for high-energy proto/lepton colliders and high-intensity lepton colliders shall be developed.

**Specific Requirements:**

Profound knowledge for perturbative techniques in quantum field theory (QED, QCD, electroweak standard model), experience with automated tools for precision calculation and Monte Carlo event generators. Skills in numerical calculations, modern programming languages and scientific computing.

Experience with topics like higher order corrections, QCD/QED showers, matching, resummation are welcome, but not mandatory

**Work Place:** Hamburg or Zeuthen

**Earliest Start:** December 2015

**Language Requirement:** (please note that we require for all candidates proven records of English, e.g. CAE certificate)

**Further Remarks:** Postdocs in Theoretical Particle Physics have a world-wide start date on October 1st, which is our preferred date. Later starts

(like Nov 1st, Dec 1st, or Jan 1st 2016 are possible)