Call for 2016 DESY-ONACPR Fellowship Applicants

## **Research Laboratory: DESY (***Please reference to DESY-ONACPR-2016-12***)**

### Division/Group: FH/T

### Supervising scientist: Géraldine SERVANT Email/Phone: geraldine.servant@desy.de

### Research Field: High energy theory and phenomenology, Particle Cosmology

**Position:** Postdoctoral Research at the interface between particle theory and cosmology

While the LHC is entering a second round of extensive experimental testing, the field of particle astrophysics and cosmology will similarly be experiencing an era of new data, e.g. from cosmic ray telescopes, galaxy surveys and from gravity wave astronomy. Low energy experiments searching for axion-like particles are also opening new directions of investigations for the dark sector. In this exciting experimental context, the search for new physics is undertaken from multiple approaches. One important task of theorists is to prioritize well-motivated models in the huge parameter space of masses and couplings in order to define new detection strategies. This project will participate in this global and massive effort.

The DESY Theory group has very string expertise in all areas Particle cosmology, covering all facets of early universe cosmology, from inflation, cosmological phase transitions, baryogenesis, dark matter phenomenology, and axion physics.

In this exciting context, the search for new physics is undertaken from multiple approaches in a vast array of experimental strategies.

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**Research Area:**

**Specific Requirements:**

The DESY Theory group has very strong expertise in Particle cosmology, covering all facets of the physics of the early universe, from inflation, cosmological phase transitions, baryogenesis, dark matter phenomenology, to axion physics and cosmological gravitational waves.

The candidate should have the background knowledge and technical skills to be able to collaborate on these topics. Expertise in collider phenomenology and/or model building will also be appreciated.

**Work Place:** Hamburg

**Earliest Start:** December 2016

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

**Further Remarks:** None.