Call for 2016 DESY-ONACPR Fellowship Applicants

## **Research Laboratory: DESY (*Please reference to DESY-ONACPR-2016-16)***

### Division/Group: CMS

### Supervising scientist: Alexei Raspereza Email/Phone: [Alexei.Raspereza@desy.de](mailto:Alexei.Raspereza@desy.de)

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### Research Field: Particle Physics, Large Hadron Collider

**Position:** Postdoctoral Research in CMS, Higgs-> Tau Tau analysis

After the recent discovery of a Higgs boson, which earned the Nobel prize for P. Higgs and F. Englert, the investigation of the properties of this novel kind of particle are of highest priority.

The CMS Higgs group at DESY has since the beginning a strong involvement in the analysis of the Higgs decay into tau leptons. This decay plays a key role in establishing and quantifying the basic properties, like the coupling of the Higgs boson to fermions and its CP properties.

In the LHC run at 13 TeV we seek to unambiguously observe this decay mode in CMS at high significance, and to explore the characteristics of this new particle at an unprecedented level.

**Research Area:**

**Specific Requirements:**

PhD in physics. Experience in High Energy Physics analysis.

C++ programming.

The CMS Collaboration authorship fees have to be covered by the Chinese home Institution.

**Work Place:** Hamburg

**Earliest Start:** November 2016

**Language Requirement:** Proven records of English

**Further Remarks:** The particle physics programme of DESY consists of large contributions to the LHC experiments CMS and ATLAS. The experimental programme is enhanced by collaboration with strong theoretical and phenomenological groups.