**2017 Helmholtz – OCPC – Programme**

**for the involvement of postdocs in bilateral collaboration projects**

**PART A**

**Title of the project:** Particle Physics: The Belle II Experiment

**Helmholtz Centre and institute:** DESY

**Project leader:** Carsten Niebuhr

**Web-address:** www.desy.de, http://belle2.desy.de

**Description of the project** (max. 1 page)**:**

As part of a German consortium DESY participates in the challenging upgrade of the Belle II detector which is scheduled to start data taking in 2018 at the SuperKEKB electron–positron collider in Japan. The goal of the upgrade is The German groups are responsible for building a novel pixel vertex detector (PXD) based on the DEPFET technology. Within this project DESY has major responsibilities in the areas of CO2 cooling, mechanical integration, tracking and alignment, background simulation etc.. The first phase of the commissioning of the detector will take place end of 2017 at DESY. First collisions will be used to study machine background and optimize parameters for detector operation.

The DESY group is also involved in the analysis of Belle I data taken in the period 1999-2010 and the preparation for Belle II analyses. The large and unique Belle data sample corresponds to an integrated luminosity of more than 1 ab-1 and offers possibilities for many interesting physics analyses.

**Description of existing or sought Chinese collaboration partner institute** (max. half page)**:**

**Required qualification of the post-doc:**

* PhD in experimental particle physics
* Experience in development or operation of a modern particle detector
* Skills in software development and data analysis
* Good command of English language and communication skills
* Demonstrated ability to work in a team
* Readiness to travel to Japan for detector commissioning and data taking

**PART B**

**Documents to be provided by the post-doc:**

* + Detailed description of the interest in joining the project (motivation letter)
  + Curriculum vitae, copies of degrees
  + List of publications
  + 2 letters of recommendation

**PART C**

**Additional requirements to be fulfilled by the post-doc:**

* Max. age of 35 years
* PhD degree not older than 5 years
* Very good command of the English language
* Strong ability to work independently and in a team