**2018 Helmholtz – OCPC – Program**

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

**DESY\_OCPC\_2018-20**

**PART A**

**Title of the project:**  ATLAS Detector Upgrade

**Helmholtz Centre and Research Group: DESY**

**Project leader: Dr. Ingrid-Maria Gregor** [**ingrid.gregor@desy.de**](mailto:krisztian.peters@desy.de)

**Web-address:** http://atlas.desy.de/

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

The DESY ATLAS group is heavily involved in the Phase-II Upgrades of the ATLAS Detector at the LHC at CERN. The Phase-II upgrades will enable ATLAS to fully exploit the increased Luminosity of the High-Luminosity LHC, which is planned for 2026. The group is going to build an end-cap with about 30 m2 of silicon for the new silicon strip detector as part of the new inner tracking system of ATLAS. We are presently preparing for the construction of the detector by participating in the detector simulation effort and the layout process, by building and testing prototypes and by planning the infrastructure needed for its assembly. In addition, we are contributing to the developments of silicon modules, electronics and mechanics for the future detector and are very active in test beam studies of the various prototypes, also using the local electron test beam at DESY. The successful candidate will be expected to participate in at least one of these activities.

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

Institute of High Energy Physics Beijing

Hefei University of Technology

School of Physics and Astronomy Shanghai Jiao Tong University

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

* PhD in experimental particle physics
* Experience with particle physics detectors
* Additional skills in computing

**PART B**

**Documents to be provided by the post-doc, necessary for an application to OCPC via a postdoc-station:**

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

**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