

Position Profile for Chinese Applicants running for 2019 Helmholtz – OCPC – Program

PART A (Info about the Position)

Helmholtz Centre and institute: DESY

Title of the project: ATLAS Detector Upgrade and Generic Detector R&D

Project leader: Dr. Ingrid-Maria Gregor

Web-address: <http://atlas.desy.de/>

Description of the project (max. half page):

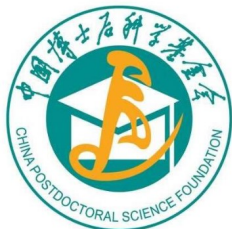
The DESY ATLAS group is heavily involved in the Phase-II Upgrades of the ATLAS Detector at the LHC at CERN. The Phase-II upgrades will enable ATLAS to fully exploit the increased Luminosity of the High-Luminosity LHC, which is planned for 2026. The group is going to build an end-cap with about 30 m² 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. In addition, the candidate can join our activities in generic detector R&D towards next generation silicon detectors. This work is organised around the existing pixel telescope test beam infrastructure and spans from sensor developments to data acquisition design.

Required qualification of the post-doc:

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

PART B (Materials and Procedures)

**HELMHOLTZ** RESEARCH FOR
GRAND CHALLENGES

The
Chinese

applicants shall submit the following documents to a postdoc station affiliated to a research institution or a university, after passing through the internal selection, the qualified application shall be forwarded to OCPC, and then to Helmholtz for evaluation:

- 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 (General Conditions)

Additional requirements on the postdoctoral fellows:

- Chinese citizenship from Mainland China (allows application while staying abroad)
- Max. age of 35 years, PhD degree not more than 5 years by submission of application
- Very good command of English language
- Strong ability to work independently and in a team