Contribution ID: **52** Type: **On-site planned, but remote also possible**

Experimental studies on the strip end-cap system test for the new ATLAS Inner Tracker

The ATLAS Inner Tracker (ITk) is the new foreseen all-silicon tracking detector for the ATLAS experiment at the High-Luminosity LHC starting in 2026. A substantial part of the new detector, one of the strip detector end-caps, will be assembled at the DESY site.
In the phase of the production, a large number of different detector components ranging from sensors over modules to populated detector structures will be built and tested by worldwide distributed production sites, with DESY among them.
In parallel, a fraction of the full end-cap, the so-called strip end-cap system test, will be assembled and tested at DESY.
The student will contribute in the planned measurements of the system test, in the development of necessary software for the readout and DAQ system, and in the analysis of the measured data from the system. Optionally, the student will have the opportunity to contribute to the testing and quality control of detector components for the ATLAS upgrade.

Field

B3: Development of experimental particle physics equipment (hardware-oriented)

DESY Place

Hamburg

DESY Division

FH

DESY Group

ATLAS

Special Qualifications:

Some programming experience (python preferred), hardware and/or lab work experience, if remote (we really prefer this not to be remote): (close to) DESY timezone

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