

ATLAS ITk strip detector - developments on the end-cap system test

The ATLAS detector is one of the four LHC experiments and will be upgraded for the upcoming high luminosity runs. For that, a new all-silicon tracking detector, the Inner Tracker (ITk), is being built right now. At DESY, the so-called system test for the end-cap system is being developed and serves as the main testbench for the whole detector concept.

Within the summer student project, the student will have the opportunity to work on this unique setup and can get involved in topics like detector readout, cooling, powering and control systems. During this work, several test measurements will be conducted, analysed and evaluated in view of the designated detector operation. This involves hands-on work in the big clean room facilities, but also programming in terms of automation and analysis of the taken datasets.

Group

FH-ATLAS

Project Category

B2. Development of experimental equipment (hardware-oriented)

Special Qualifications

Silicon detectors, Python, electronics (basics)

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