

CMS Phase-2 Tracker Integration

The student will participate in various activities related to the integration of the CMS Phase-2 Tracker Endcap. The integration of detector modules onto the supporting mechanical structure brings various challenges that have to be addressed. The thermal coupling of the PS detector modules using a thermal interface material has to be established. Candidate materials are being studied. The thermal and mechanical properties are evaluated and material application techniques have to be developed in conjunction with a module integration procedure that needs to be established. The quantification of the thermal conductivity of various materials used in the detector construction is needed, using a dedicated measurement setup. Module integration needs to be exercised including service routing.

These ongoing activities provide ample opportunities for a student to engage in hands on activities in the detector construction. Exact task descriptions have to be defined close in time depending on the progress of the project.

Field

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

DESY Place

Hamburg

DESY Division

FH

DESY Group

CMS

Special Qualifications:

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