

Test Beam Characterisation of a thin pixel sensors

The TelePix HV-MAPS sensor is a fast, thin timing layer for the telescopes. The pixel pitch of 25 um in one dimension also has the potential to precisely determine the position of passing particles, depending on the rotation angle. The student will get familiar with the sensor in the beginning of the project and then carry out measurements at different rotations to check for an optimal angle to determine the best possible spatial resolution. After a test beam campaign, the data will be analysed and if possible compared to simulation.

30% detector/ hardware calibration

30% software work

40% Interpreting/understanding results/physics

Field

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

DESY Place

Hamburg

DESY Division

FH

DESY Group

FTX-TBT

Special Qualifications:

basic programming and hardware experiences is a plus

Primary authors: HERKERT, Adrian (FTX (FTX Fachgruppe TBT)); HUTH, Lennart (DESY)