Contribution ID: **6**   Type: **not specified**

Upgrade of CMS LHC beam pickup logic

The beam pickup signals are processed at the CMS experiment at CERN by a programmable logic board programmed in VHDL. Coincidences between the signals from clockwise and counterclockwise beams are formed and provided to the CMS trigger logic. This project will reimplement the logic on a modern Cyclone V based FPGA and verify its operation by simulating LHC bunch patterns. Additional monitoring and readout capabilities will be developed.

Field

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

DESY Place

Hamburg

DESY Division

FH

DESY Group

CMS

Special Qualifications:

Some experience in electronics and FPGA programming desirable.

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