

Abstract Submitted
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Tests of the CMS Phase 1 Upgrade FPIX Half Cylinders XUAN CHEN, Univ of Illinois - Chicago, CMS COLLABORATION — The pixel detector is an integral part of the CMS silicon tracker, designed to measure the position and momentum of charged particles produced in high-energy collisions at the Large Hadron Collider (LHC). The phase 1 upgrade of the CMS forward pixel detector will replace the existing forward pixel detector at the end of 2016. This upgrade will include three forward disks on each end, and is organized in four mechanical support structures, called half-cylinders. Each half-cylinder contains frontend readout electronic boards, power regulators, cables and fibers in addition to the three half disks with the active pixel modules. Full system tests are being performed on the half cylinders after each step of assembly and after its completion. I will describe the various steps of the the testing and qualification procedure, focusing on the final assembly and the full system test for the integrated half-cylinder. I will also discuss the results obtained for the completed detector before its shipment to CERN.

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