

# Testing of the HDI's to be installed during Phase 1 Upgrades of the LHC

*Monday, 10 June 2013 13:54 (18 minutes)*

The CMS pixel detector is an all-silicon tracking device located closest to the interaction point. Following the first long shut down of the LHC, in order to maintain the high performance of the tracker, the pixel detectors must be upgraded to handle the increased amounts of event pileup. One of the components of the upgrade is the forward pixel detector, which uses a High Density Interconnect (HDI) to connect the pixels and the readout chip. During the shutdown, a pilot system will be installed in the forward pixels to test the performance of the new design. In addition to this pilot program, 50 HDI's are currently being visually and electrically tested by a team from the University at Buffalo, located on-site at Fermilab. The current results of these tests will be presented.

**Primary author:** SMITH, Brendan (University at Buffalo SUNY)

**Presenter:** SMITH, Brendan (University at Buffalo SUNY)

**Session Classification:** Session 1