Tipp 2014 - Third International Conference on Technology and Instrumentation in Particle Physics



Contribution ID: 427 Type: Poster

## The CMS Central Hadron Calorimeter Upgrade

The CMS central hadron calorimeters will undergo an extensive upgrade before LHC Run 3 which will occur in 2019. The upgrade is based on replacement of the current HPD with SIPMs read out into a new ADC, the QIE11. Longitudinal segmentation of the HCAL will be increased by about 3X depending on eta. The entire front and back end electronics will be replaced with a 3X higher bandwidth system. The new backend is based on  $\mu$ TCA. We report on the design and status of SIPM development, QIE11 development, and backend system tests.

Author: FREEMAN, Jim (Fermi National Accelerator Lab. (US))

Presenter: FREEMAN, Jim (Fermi National Accelerator Lab. (US))

Track Classification: Sensors: 1a) Calorimetry