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The Complete Test Results of 1800 Multi-Anode Photomultiplier Tubes for CMS-HF Calorimeter Upgrade EMRAH TIRAS, None, CMS-HCAL COLLABORATION — The Compact Muon Solenoid (CMS) is one of the two large general-purpose particle detectors used with the Large Hadron Collider (LHC) project at CERN. The Hadronic Forward (HF) calorimeters cover the polar angles from 0.78° to 5.70° with respect to the beam direction at each end of the CMS detector. The HF plays important roles in identifying tagging jets, measuring the luminosity and determining the missing transverse energy. Currently, the HF undergoes upgrades (2013 and 2014) to deal with larger beam currents and higher center-of-mass energy collisions expected in the LHC Run-II starting in 2015. The High Energy Physics (HEP) group at the University of Iowa is responsible for characterization and installation of 1800 multi-anode photo-multiplier tubes (PMT), testing of readout boxes and light guide systems and the replacement of the frontend electronics. We are also participating in simulation studies to understand the expected performance of the upgraded HF. In this talk, the complete test results of multi-anode PMTs for several different parameters are presented. These results can provide insights about the expected performance of the upgraded CMS-HF detector.

> Emrah Tiras None

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