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Forward Calorimeter for the Compact Muon Solenoid ADURAMIGBA SOPEJU, Benedict College, CHRISTOPHER COWDEN, MARIO SPEZZIGA, NURAL AKCHURIN, CERN/CMS TEAM — In 2007, the Large Hadron Collider (LHC) at CERN in Geneva would be turned on and then used to study the collision of protons and lead ions at extremely high energies. The purpose of these high energy collisions is to study the origin of mass and recreate the conditions of the first few moments of the universe. The Compact Muon Solenoid (CMS) is one of the experiments at LHC. I am presently working on the Forward Calorimeter (HF) of the CMS. Electrons, Photons and hadrons would be stopped by the calorimeters allowing their energies to be measured. The Calorimeter is made up of very sensitive materials mostly thin quartz fibers embedded in blocks of steel. The particles shower in the blocks and produce Cherenkov radiation in the optic fibers. This provides an energy measurement for both particles interacting electromagnetically and hadronically. The current goal for this calorimeter is to increase the forward coverage of CMS, improving the measurement of transverse energy, especially for high energy forward jets, which are a signature of some important physics processes

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