



Contribution ID: 167

Type: **Talk**

[384] The upgrade of the CMS Electromagnetic Calorimeter for the High-Luminosity LHC

Thursday, September 2, 2021 3:15 PM (15 minutes)

The Electromagnetic Calorimeter (ECAL) of the CMS experiment at CERN is a hermetic, fine grained, homogeneous calorimeter made of about 75,848 lead tungstate scintillating crystals. During the Run 1 and Run 2 operations of the Large Hadron Collider of CERN, the CMS ECAL played a key role in the discovery of the Standard Model Higgs Boson. In order to cope with ~140 pileup events expected for the High Luminosity upgrade of the LHC (HL-LHC), a new design of the CMS ECAL will be needed. Future challenges of the ECAL will be presented in this talk motivating the evolution of the design to maintain its performance during the HL-LHC data-taking.

Author: MARCHESE, Luigi (ETH Zurich (CH))

Presenter: MARCHESE, Luigi (ETH Zurich (CH))

Session Classification: Nuclear, Particle- & Astrophysics

Track Classification: Nuclear, Particle- and Astrophysics (FAKT - TASK)