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Electron and Photon Trigger Commissioning and Performance on 7 TeV data

The CMS electromagnetic calorimeter (ECAL) has been designed to precisely measure electron and photon energy. It is made of 75848 lead tungstate (PbWO4) crystals and its characteristics have been optimized for the search of the Higgs boson in its two photons decay mode. In view of the high interaction rate at the Large Hadron Collider (LHC), CMS implements a sophisticated online selection system that achieves a rejection factor of nearly 106 . In the intense hadronic environment, the ECAL trigger system provides a powerful tool to select interesting physics events which may contain electrons or photons in their final states. The first 7 TeV collision events recorded by the CMS experiment have been analyzed in order to estimate the electron and photon trigger performance in terms of efficiency.

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