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## Electron and Photon performance with the upgraded CMS detector for HL-LHC

For the LHC High Luminosity phase (HL-LHC) the CMS Collaboration is planning to upgrade the detector to cope with the extreme particle rates and to reduce the impact on the physics performance due to the large number of pileup events. The most important upgrades will involve new and thinner Silicon Tracker, with extended rapidity coverage, and a new Silicon High Granularity Calorimeter in the Endcap. Additional changes to the Electromagnetic Calorimeter in the barrel will allow to recover from the loss of performance due to the large irradiation of the existing detector. A detailed simulation of the new detector has been successfully integrated in the official CMS software, allowing physics studies to be carried out with optimized reconstruction algorithms. The contribution will review the status of the CMS upgrade project with the usage of the new detector geometry with particular emphasis on the reconstruction and identification performance of electrons and photons and the impact on physics analyses.

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