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The CMS Outer Tracker Upgrade for the High Luminosity LHC

The High Luminosity LHC scenario, HL-LHC, with a planned instantaneous luminosity of the upgraded machine of $5 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ by year 2028, and an integrated luminosity of 3000 fb^{-1} by the end of year 2037, requires the complete replacement of the CMS Tracker detector to cope with the extremely challenging new operating conditions. The talk will focus on the CMS Outer Tracker system for the Upgrade Detector, describing the new proposed layout and the technological choices which have to provide robust tracking and also Level-1 trigger capabilities. Recent progress on Outer Tracker R&D activities will be reported.

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