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## CMS Silicon Tracker upgrade for HL-LHC

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LHC is expected to increase its luminosity above the original nominal value of  $10^{34} \text{ cm}^{-2}\text{s}^{-1}$ , eventually achieving an order of magnitude increase after major upgrades will be performed after 2020. This configuration of the machine is known as High Luminosity-LHC (HL-LHC).

CMS needs a completely new tracking system to maintain adequate performance in the HL-LHC environment and to provide tracking information for the Level-1 trigger decision.

The most relevant requirements and constraints are summarized, along with highlights from some of the R&D activities.

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