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The CMS Outer Tracker Upgrade for the HL-LHC MAXWELL HERRMANN, The University of Iowa — The LHC is planning an upgrade program which will smoothly bring the luminosity up to $5 \times 10^{34} cm^{-2} s^{-1}$, to possibly reach an integrated luminosity of 3000 fb^{-1} at the end of the next decade. This scenario, called the High Luminosity LHC (HL-LHC), will require an upgrade to the LHC detectors known as Phase-2 upgrade. The current CMS Outer Tracker will be replaced by a completely new device, in order to fully exploit the highly demanding operating conditions and the delivered luminosity. The new Tracker will also have trigger capabilities. To achieve these goals, RD activities are ongoing to develop solutions that would make this possible. In this presentation, some design choices for the CMS Outer Tracker upgrade are discussed along with some highlights of the assembly and testing developments.

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