

Abstract Submitted
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The CMS Outer Tracker Upgrade for the HL-LHC CORY RUDE,
MAXWELL HERRMANN, University of Iowa — The LHC is planning an upgrade
program which will smoothly bring the luminosity up to 510^{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, R&D 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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