

Abstract Submitted
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An Upgraded Material Budget for the CMS Pixel RACHEL BARTEK, Catholic University of America, CMS COLLABORATION — The material budget is critical for simulating how particles transverse the detector. Accurately describing where both passive and active material is located is particularly crucial for the tracker where multiple scattering slightly alters the particle's trajectory in the detector. The tracker is also the closest to the interaction point so in order to cope with increasing fluences at the Large Hadron Collider the Compact Muon Solenoid (CMS) pixel detector was upgraded necessitating an upgraded material budget to match the new detector. We will present the material budget for the Phase I pixel upgrade of the CMS detector along with cross checks using data to validate the detector description.

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