

RPC upgrade project for CMS Phase II

Wednesday, 21 February 2018 10:00 (20 minutes)

The Resistive Plate Chambers (RPC's) will be extended to the high pseudo-rapidity region, a challenging region for muon reconstruction in terms of background and momentum resolution, of the CMS muon system where only the Cathode Strip Chambers (CSC) are present. During the last years, several studies on the performance of new technologies and configurations have been done using Monte-Carlo simulations and testing new detectors in the Gamma Irradiation Facility at CERN. The results indicate that the technology to be used for the extension of the RPC system is HPL double gap RPC. The RPC Upgrade Phase II program will be finished with the installation of the chambers during the Yearly Technical Stops at the end of 2022 and 2023. A general talk describing the CMS Phase II upgrade will be presented.

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Session Classification: Upgrade & Longevity