

Upgrade of the CMS tracker with Tracking Trigger

Friday, 30 September 2011 09:45 (45 minutes)

The planned upgrades of the the LHC and its injector chain are expected to allow operation at luminosities around or above $5 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ sometimes after 2020, to eventually reach an integrated luminosity of 3000 fb⁻¹ at the end of that decade. In order to fully exploit such operating conditions and the delivered luminosity, CMS needs to upgrade its tracking detectors and substantially improve its trigger capabilities. To achieve such goals, R&D activities are ongoing to explore options and develop solutions that would allow to include tracking information at Level-1. Some of the options considered are reviewed, discussing their potential advantages and disadvantages.

Presenter: Dr ABBANELO, Duccio (CERN)

Session Classification: P9 TOPICAL - Upgrade of the CMS tracker with Tracking Trigger

Track Classification: Trigger