

Contribution ID: 415

Type: Parallel Talk

Operational Experience and Performance with the ATLAS Pixel detector with emphasis on radiation damage

Thursday 6 July 2017 09:45 (15 minutes)

The tracking performance of the ATLAS detector relies critically on its 4-layer Pixel Detector, that has undergone significant hardware and software upgrades to meet the challenges imposed by the higher collision energy, pileup and luminosity that are being delivered by the Large Hadron Collider, with record breaking instantaneous luminosities of 1.3×10^{34} cm-2 s-1 recently surpassed.

The key status and performance metrics of the ATLAS Pixel Detector are summarised, and the operational experience and requirements to ensure optimum data quality and data taking efficiency are described, with special emphasis to radiation damage experience.

Experimental Collaboration

ATLAS

 Primary author:
 BUTTI, Pierfrancesco (CERN)

 Presenter:
 BUTTI, Pierfrancesco (CERN)

 Session Classification:
 Detectors and data handling

Track Classification: Detector R&D and Data Handling