

**11th International "Hiroshima" Symposium on the Development and Application of Semiconductor Tracking Detectors (HSTD11) in conjunction with 2nd Workshop on SOI Pixel Detectors (SOIPIX2017) at OIST, Okinawa, Japan**

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## **Operational Experience and Performance with the ATLAS Pixel detector**

*Tuesday, 12 December 2017 09:50 (20 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  $1.3 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$  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.

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