

ATLAS Pixel Radiation Monitoring with HVPP4 System

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We will describe the principles of radiation damage monitoring using the current measurements of the pixel sensors to be provided by the circuits of ATLAS Pixel Detector HVPP4 System. The dependence of the leakage current with respect to an integrated luminosity at several temperature scenarios will be presented. Based on the analysis we have evaluated the sensitivity specifications for a Current Measurement System under development at University of New Mexico, USA and CERN. The status of the development will be reported as well.

Summary

Report on the development of ATLAS Pixel Detector current monitoring system for the pixel sensors.

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