

# ATLAS pixel detector radiation damage monitoring and modeling status report

*Tuesday, 19 November 2019 15:55 (20 minutes)*

This talk presents updated measurements of fluence-sensitive radiation damage quantities with the ATLAS pixel detector. In particular, the first full Run 2 fluence measurement using the leakage current is presented. The mismodeled  $|z|$ -dependence is observed across all of Run 2 and with measurements of additional quantities. In addition to leakage current, the depletion voltage is also presented and the fidelity of the Hamburg model is discussed. Finally, the status of radiation damage modeling in the ATLAS simulation will be presented.

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