

ATLAS ITk Strip Sensor Quality Assurance

Saturday, 1 November 2025 14:40 (20 minutes)

The ATLAS experiment will replace its Inner Detector with an all-silicon ITk for Phase-2. To ensure production quality of ATLAS18 silicon strip sensors—designed to withstand up to 4000 fb^{-1} —we establish a streamlined QA program built on standardized IV, CV, and CCE measurements at IHEP using a dedicated test piece (Mini sensor for CCE, MD8 for IV/CV). Irradiation tests are included as part of the QA to assess pre- and post-exposure performance. This talk will present the ATLAS community-endorsed QA procedures and the corresponding measurement setups implemented at IHEP.

Primary author: Mr LI, Zhan (IHEP)

Presenter: Mr LI, Zhan (IHEP)

Session Classification: Parallel 1: Upgrade

Track Classification: Upgrade