

# The LHCb SciFi Tracker

*Thursday 18 July 2024 11:36 (18 minutes)*

The LHCb Experiment is running after its first major upgrade to cope with increased luminosities of LHC Run3, being able to improve on many world-best physics measurements. A new tracker based on scintillating fibers (SciFi) replaced Outer and Inner Trackers and is delivering an improved spatial resolution for the new LHCb trigger-less era, with a readout capable of reading ~524k channels at 40MHz. Fully automated calibration routines for SciFi Detector Devices, based on dedicated software tools and operational procedures, were validated during SciFi commissioning and have been applied to further improve the detector performance since the beginning of Run3. This oral presentation demonstrates the experience gained on SciFi operations during data taking - such as solutions to improve performance - and presents early results showing the performance after commissioning versus the expected one. Foreseen challenges to face with detector aging and luminosity upgrades will also be presented.

## Alternate track

### I read the instructions above

Yes

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