Contribution ID: **513** Type: **Poster**

The commissioning and operational experience of LHCb - Upstream Tracker

The LHCb detector has undergone a significant upgrade, enabling the experiment to acquire data with an all-software trigger, made possible by real-time front-end readout and fast, efficient online reconstruction. The Upstream Tracker (UT), a four-plane silicon microstrip detector located in front of the dipole magnet, is crucial for charged particle trajectory reconstruction. The UT is essential for the reconstruction of long-lived particles that decay outside the acceptance of the LHCb vertex detector. The UT was installed in LHCb in early 2023. The commissioning phase was challenging due to data synchronisation issues related to the GBTx properties. We report the lessons learned during the commissioning phase and operational experience from the first year of run 3 data taking at LHCb when the UT performance with beams was extensively studied.

Secondary track

Authors: COLLABORATION, LHCb; KRUPA, Wojciech (Syracuse University (US))

Session Classification: T11

Track Classification: T11 - Detectors