

SEMINAR TEILCHENPHYSIK

Thema

The upgraded LHCb
detector at the start of
Run 3: from commissioning
to physics production

Abstract

The LHCb experiment underwent a major upgrade during the last long shutdown in order to operate at fivefold increase in instantaneous luminosity compared to the previous runs. Among the major changes, the tracking system has been fully replaced and the readout of all subdetectors is now at 40 MHz with a fully software-based trigger.

This talk will focus on how to transition from a newly installed detector to a fully functioning and performant system in a process known as commissioning, spanning from the hardware side to reconstruction, trigger, alignment, and calibration. The preliminary performance of the detector will be presented, including subsystem-specific and global figures such as tracking reconstruction and particle identification efficiencies. In particular, the goal for this year was to reach the design operating conditions: how this was achieved and prospects for this exciting data set will be described.

Vortragender

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Ort

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Zeit

Mittwoch, 11.12.2024
12:00 – 13:00 Uhr

im Auftrag:

Dr. Maik Becker