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Run-3 improvements in the ATLAS online luminosity measurement

Thursday 18 July 2024 20:40 (20 minutes)

The ATLAS Online Luminosity Calculator (OLC) is a standalone component of luminosity-related software responsible for the calibration of online luminosity measurements from the various ATLAS luminometers, as well as for providing an interface between ATLAS and the LHC. It also provides the infrastructure for synchronizing the LHC beam movements with the ATLAS DAQ during beam separation scans. In Run-3, the system has seen several developments aimed at making the OLC as a standalone system able to provide data from a wider range of luminometers. This involves a larger degree of integration between the LUCID-2 software and the OLC. The presentation will focus on recent developments, including the ability to switch between using ATLAS or LUCID-2 as the source for time measurements, and the possibility to switch between several different sources to retrieve or calculate the current bunch pattern in the LHC. The presentation will also discuss developments related to the beam scan software.

Alternate track

I read the instructions above

Yes

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