

Luminosity Anomaly Finder for Pixel Luminosity Telescope in Run 3 data taking

Tuesday 2 December 2025 14:45 (20 minutes)

Luminosity is a precision measurement, for the CMS experiment. During the Run 3, the uncertainty expected in the luminosity for each year is expected to be *less than* 1%. However, with the detector aging, some issues with the electronics readout may occur. For luminometers as PLT with redundant measurements, this issues may not affect strongly the central measurement of the luminosity, but its uncertainty. Then, it's needed an algorithm to simplify the fill validation to take into account only the "well behaved" channels in the luminosity calculation. This same algorithm could be implemented in redundant measurements to detect anomalous behaviors, and could be implemented during the online data taking.

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Session Classification: LHC