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Type: **Parallel Talk**

Proton reconstruction with the Precision Proton Spectrometer (PPS) in Run 2 and expectations from Run 3

Saturday, 9 July 2022 18:20 (20 minutes)

The Precision Proton Spectrometer (PPS) started operating in 2016 and has collected more than 110 fb^{-1} of data over the course of the LHC Run 2, now fully available for physics analysis. The talk will discuss the key features of PPS alignment and optics calibrations developed from scratch. The reconstructed proton distributions, performance of the PPS simulation and finally validation of the full reconstruction chain with physics data (dilepton events) will be shown. The upcoming Run 3 will bring new opportunities for measurements with PPS, which will also be discussed.

In-person participation

Yes

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