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Recent measurements of W and Z bosons with the CMS experiment

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The large amount of data collected by the CMS experiment at the CERN LHC provides unprecedented opportunities to perform precision measurements of the standard model, which allow an accurate validation of the theory and might potentially reveal hints of new physics. Thanks to their leptonic decays, W and Z bosons guarantee a clean final state, and their relatively high production cross section permits the measurement of their properties with low systematic uncertainties and usually negligible statistical uncertainty. This talk presents an overview of recent precision measurements of electroweak bosons' properties and cross sections, carried out by CMS using Run 2 data. In addition, prospects for future physics results expected from the High-Luminosity phase of the HLC, and fostered by the planned detector upgrade, are also discussed.

In-person participation

Yes

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