Contribution ID: **452** Type: **Parallel session talk**

Precision measurements of Standard Model parameters in ATLAS

Thursday 18 July 2024 10:00 (15 minutes)

ATLAS has used the W and Z boson production processes to perform a range of precision measurements of SM parameters. The production rate of Z+jet events with large missing transverse momentum is used to measure the decay width of the Z boson decaying to neutrinos. Differential measurements of this topology with minimal assumptions on theoretical calculations are discussed and allow comparisons to the Standard Model as well as the interpretation in beyond-the-Standard-Model scenarios. Finally, the LHC pp collision data collected by the ATLAS experiment at sqrt(s)=7 TeV is revisited to measure the W boson mass and its width.

Alternate track

I read the instructions above

Yes

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