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First measurement of tW production cross-section at $\sqrt{s}=13$ TeV with CMS

The inclusive cross-section for tW production in proton-proton collisions at $\sqrt{s}=13$ TeV is measured of a dataset corresponding to an integrated luminosity of 35.9 fb $^{-1}$ collected by the CMS experiment. The measurement is performed using events with one electron and one muon in the final state along with at least one b-quark jet, and exploits kinematic differences between the signal and the dominating $t\bar{t}$ background through the use of multivariant discriminants designed to separate the two processes. The measured cross-section of $\sigma=63.1\pm1.8~({\rm stat})\pm6.4~({\rm syst})\pm2.1~({\rm lumi})$ pb is in agreement with Standard Model expectations.

Parallel Session

Electroweak, Top and Higgs Physics

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