

pPb 173.4 nb⁻¹ $\sqrt{s_{\text{NN}}} = 8.16 \text{ TeV}$

$$W^- \rightarrow \mu^- + \bar{\nu}_\mu$$

CMS*Preliminary* $p_{\text{T}}^\mu > 25 \text{ GeV}/c$

- Weak boson p_{T}
- Electroweak and $t\bar{t}$ backgrounds
- W-boson POWHEG BOX
- Signal efficiency
- Event activity
- QCD jet background
- Recoil correction
- Statistical uncertainty
- Total systematic uncertainty

