59.0 fb⁻¹ (13 TeV) 2018 Events JES_PileupPtHF₁₈ (central) CMS $(sys + 1\sigma)$ 30000 Simulation (sys -1σ) single top V+jets 25000 20000 15000 10000 5000 0.0001 0.00005 0 -0.00005-0.0001100-220 250-280 280-310 310-340 340-380 380-440 440-3000 100-280 280-320 320-360 360-400 460-560 220-250 560-3000 400-460

 M_{bl} [GeV/c²]