Supplementary material for LHCb-PAPER-2021-015

Figure 1 shows the measured nuclear modification factor compared with the result in the central region from the ALICE collaboration [1]. The result from the CMS collaboration [2], which covers $|\eta| < 1$, is in agreement with the ALICE result and is not shown in the figure. The ALICE result serves as a transition between the different behaviour at the forward and backward $R_{p\mathrm{Pb}}$, although the existence of a considerable gap between the different acceptance intervals must be noted. The Cronin enhancement, hinted in the results at the central region, becomes much more pronounced in the backward region with the current uncertainties.

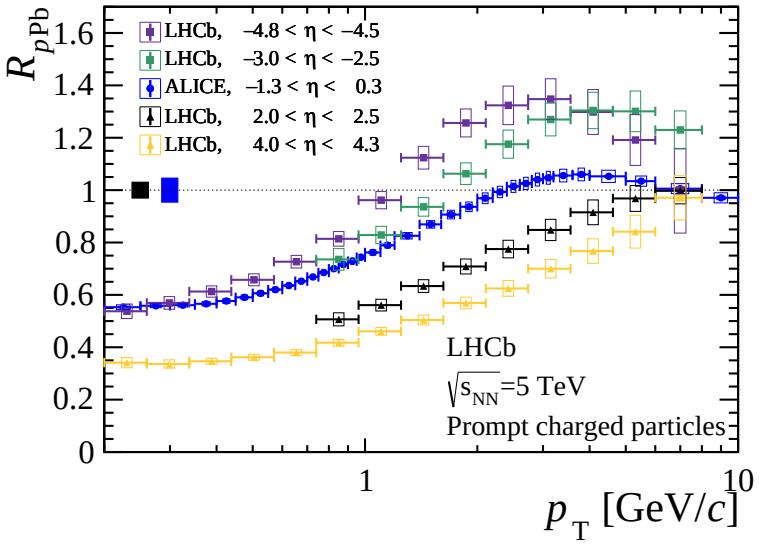

Figure 1: Nuclear modification factor as a function of p_{T} in different η intervals measured in this work and by the ALICE collaboration [1] at $\sqrt{s_{\mathrm{NN}}} = 5\,\mathrm{TeV}$. Vertical error bars account for statistical uncertainty, open boxes for uncorrelated systematic uncertainty. The correlated uncertainty from the normalisation is indicated with a filled black (blue) box at $R_{p\mathrm{Pb}} = 1$ for LHCb (ALICE).

References

[1] ALICE collaboration, S. Acharya *et al.*, *Transverse momentum spectra and nuclear modification factors of charged particles in pp, p-Pb and Pb-Pb collisions at the LHC*, JHEP **11** (2018) 013, arXiv:1802.09145.

[2] CMS collaboration, V. Khachatryan *et al.*, *Charged-particle nuclear modification factors in PbPb and pPb collisions at* $\sqrt{s_{NN}} = 5.02$ *TeV*, JHEP **04** (2017) 039, arXiv:1611.01664.