EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

Supplementary figures: "Centrality evolution of the charged–particle pseudorapidity density over a broad pseudorapidity range in Pb–Pb collisions at $\sqrt{s_{NN}} = 2.76\,\text{TeV}$"

ALICE Collaboration[*]

Abstract

This public note provide supplementary figures for the Letter [1]. The figures are the ratio of central to peripheral charged–particle pseudorapidity density, as well as the distributions with the various fitted functions mentioned in the Letter.

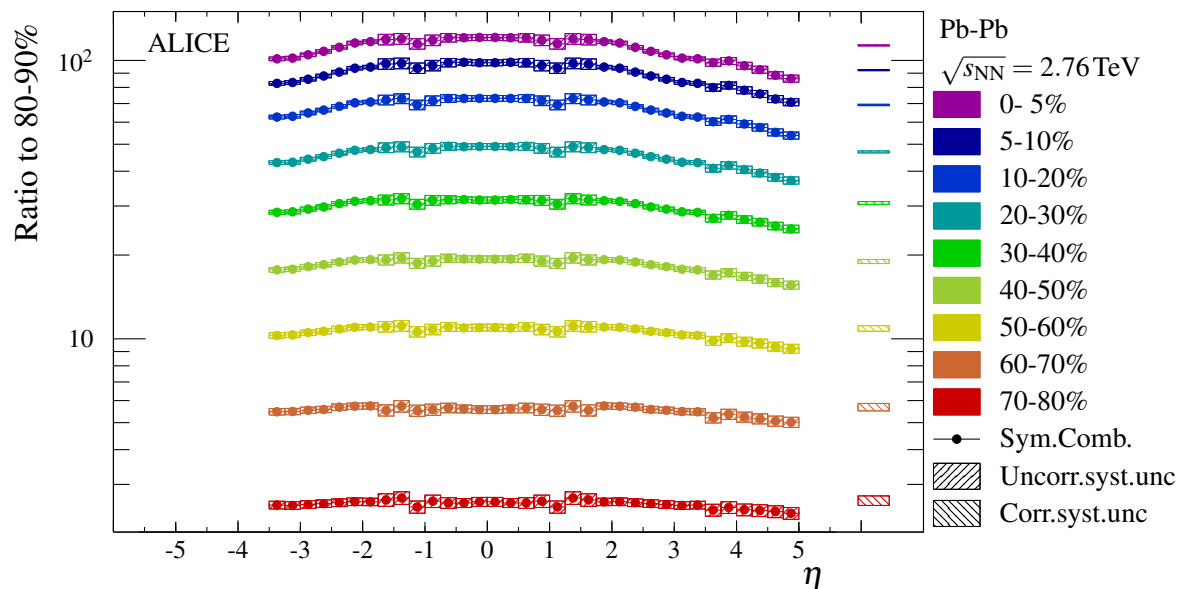[*]See [1] for the list of collaboration members

Figure 1: Ratio of the charged–particle pseudorapidity density distributions from 0 to 80% to the most peripheral distribution. Most systematic uncertainties in the forward region cancels, except for 2% of the 6.1% of the secondary correction $E(\eta)$ that stem from particle composition and p_T distributions, nor does the additional 2% in the FMD1 pseudorapidity acceptance cancel. At mid–rapidity, most systematic uncertainties do not cancel, except for the $0-2\%$ contribution from the acceptance correction, and about half of the contribution from extrapolating to $p_T = 0$.
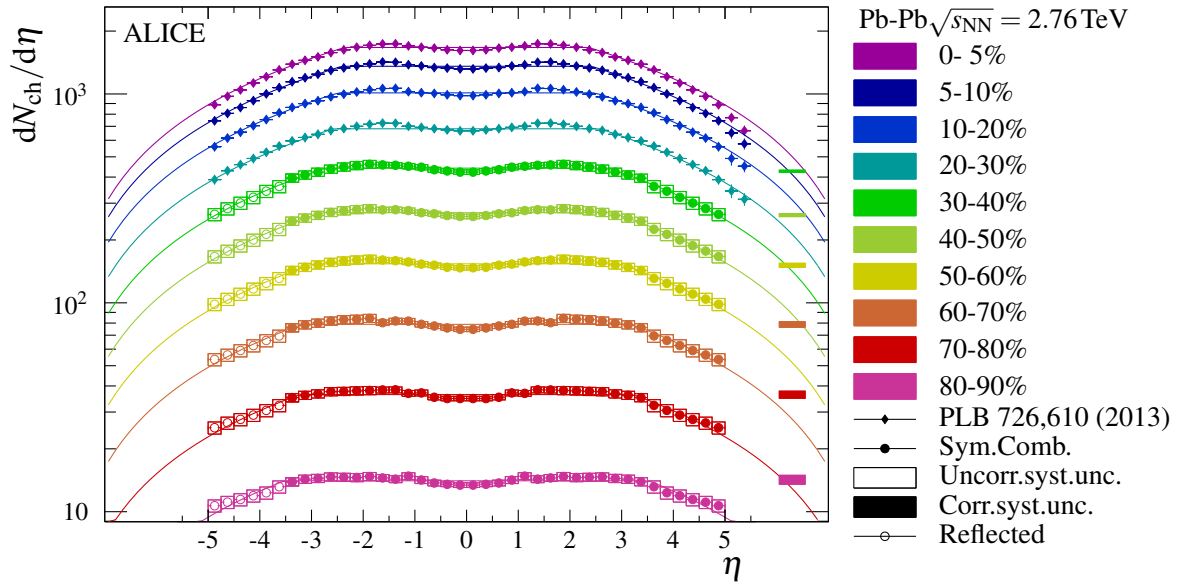
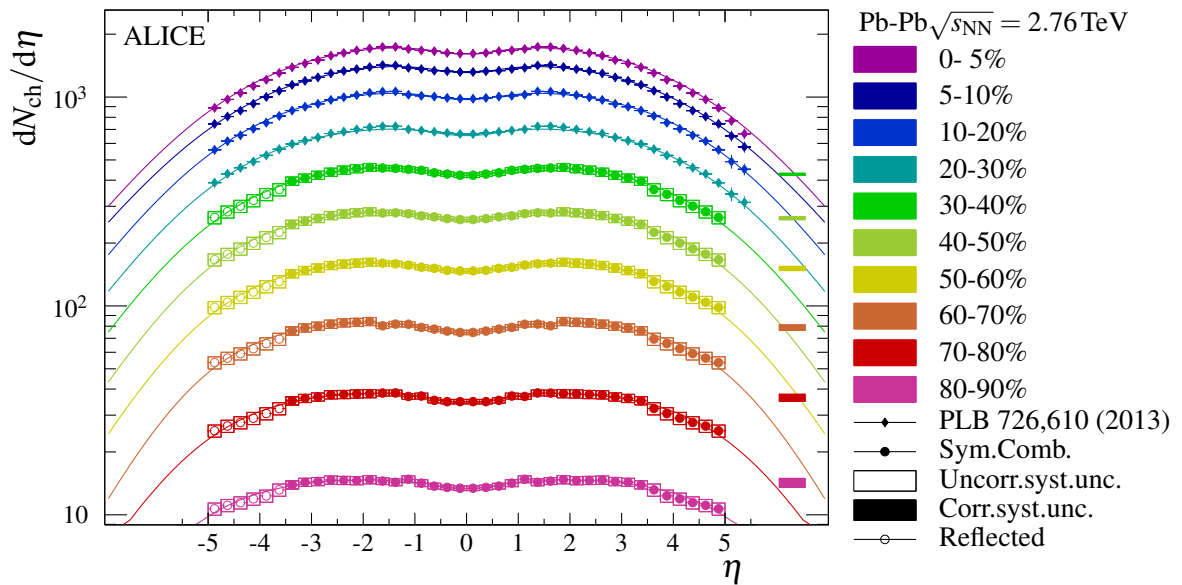**Figure 2:** Fit of f_T (Eq. 6) of [1] to the charged particle pseudorapidity density in 10 centrality bins.

Figure 3: Fit of f_P (Eq. 7) of [1] to the charged particle pseudorapidity density in 10 centrality bins.
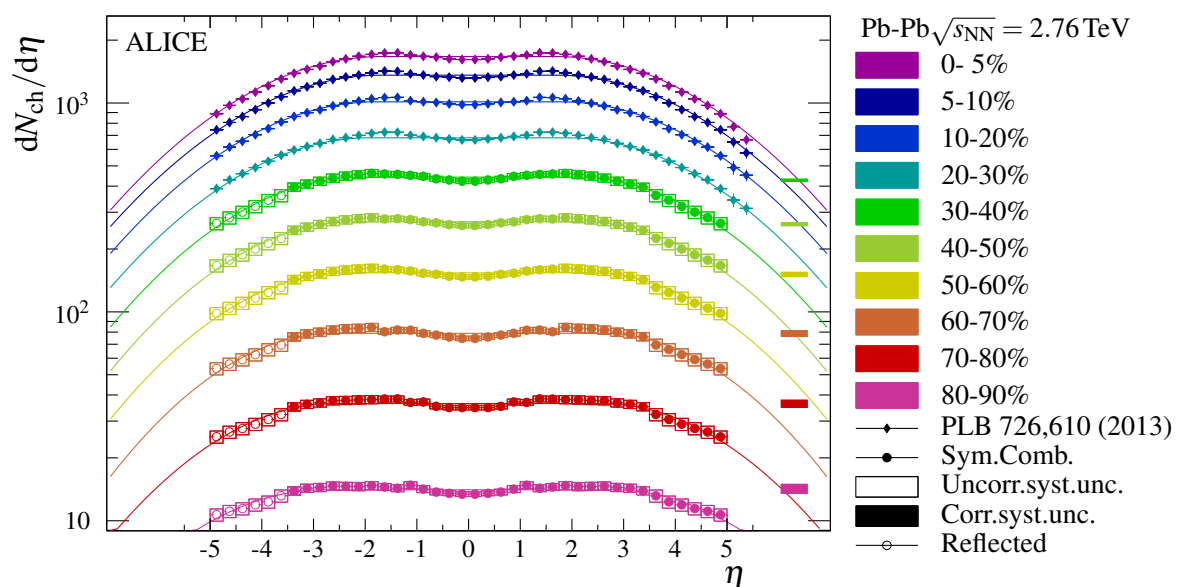
Figure 4: Fit of f_P (Eq. 9) of [1] to the charged particle pseudorapidity density in 10 centrality bins.

References

[1] **ALICE** Collaboration, J. Adam *et al.*, "Centrality evolution of the charged-particle pseudorapidity density over a broad pseudorapidity range in Pb-Pb collisions at $\sqrt{s_{NN}}$ = 2.76 TeV," arXiv:1509.07299 [nucl-ex].