

1 Supplementary material for LHCb-PAPER-2018-010

2 Additional relevant plots of detection asymmetries can be found in the supplementary
 3 material of the a_{sl}^s paper [1].

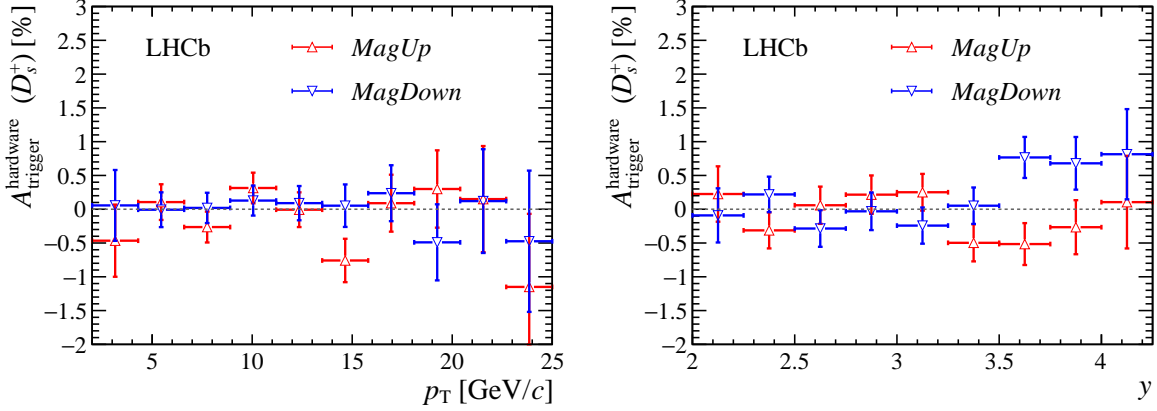


Figure 1: Hardware trigger asymmetry as a function of (left) p_T and (right) y for the $\sqrt{s} = 8$ TeV data set.

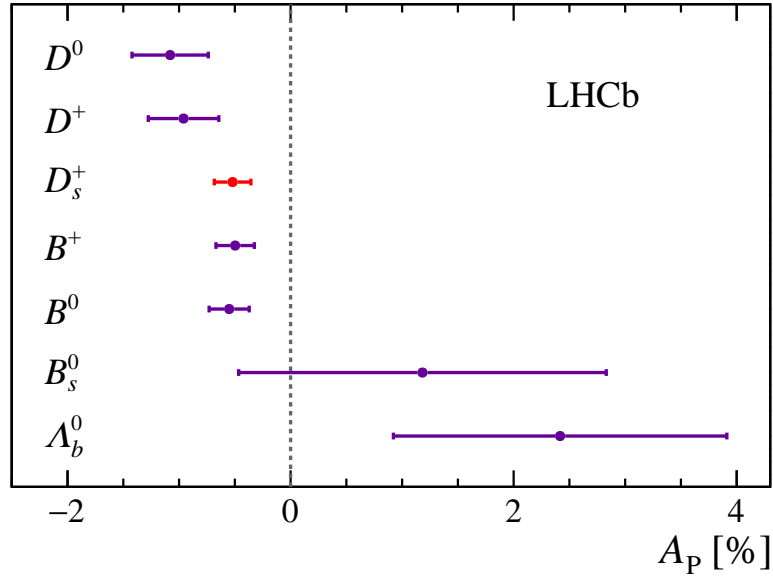


Figure 2: Overview of the production asymmetry measurements made by LHCb, wherever possible averaged over the $\sqrt{s} = 7$ TeV and 8 TeV data sets. The values are obtained by a weighted average based on their statistical uncertainties, from several measurements. The figure shows the measured production asymmetries of D^0 [2], D^+ [3], D_s^+ (this paper), B^+ [4,5], B^0 [5,6], and B_s^0 [5] mesons, and that inferred for Λ_b^0 baryons [5]. Any correlations between systematic uncertainties are not taken into account. Note that while the c -hadron production asymmetries are defined as in Eq. 1, the b -hadron asymmetries are defined as $A_P(x) = (\sigma(\bar{x}) - \sigma(x)) / (\sigma(\bar{x}) + \sigma(x))$, where $x \in \{B^+, B^0, B_s^0, \bar{\Lambda}_b^0\}$.

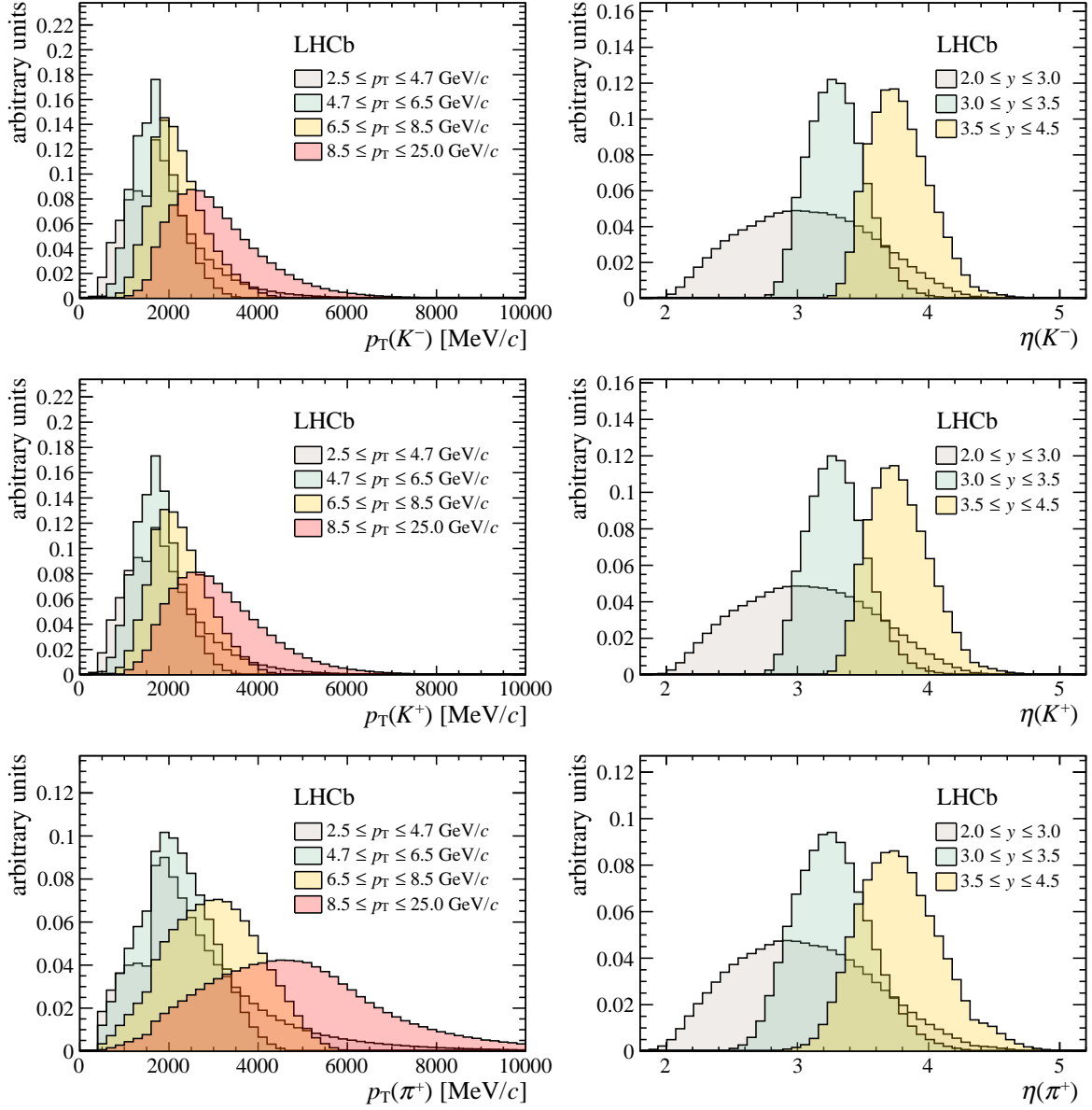


Figure 3: Distributions of (left) transverse momentum and (right) pseudorapidity spectra for the final-state particles in the 8 TeV data set after selection. Each plot shows distributions which are split in bins of D_s^+ kinematics. From top to bottom the plots show the distributions for the pion, the kaon with the same sign as the D_s^+ , and the kaon with the opposite sign.

4 References

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