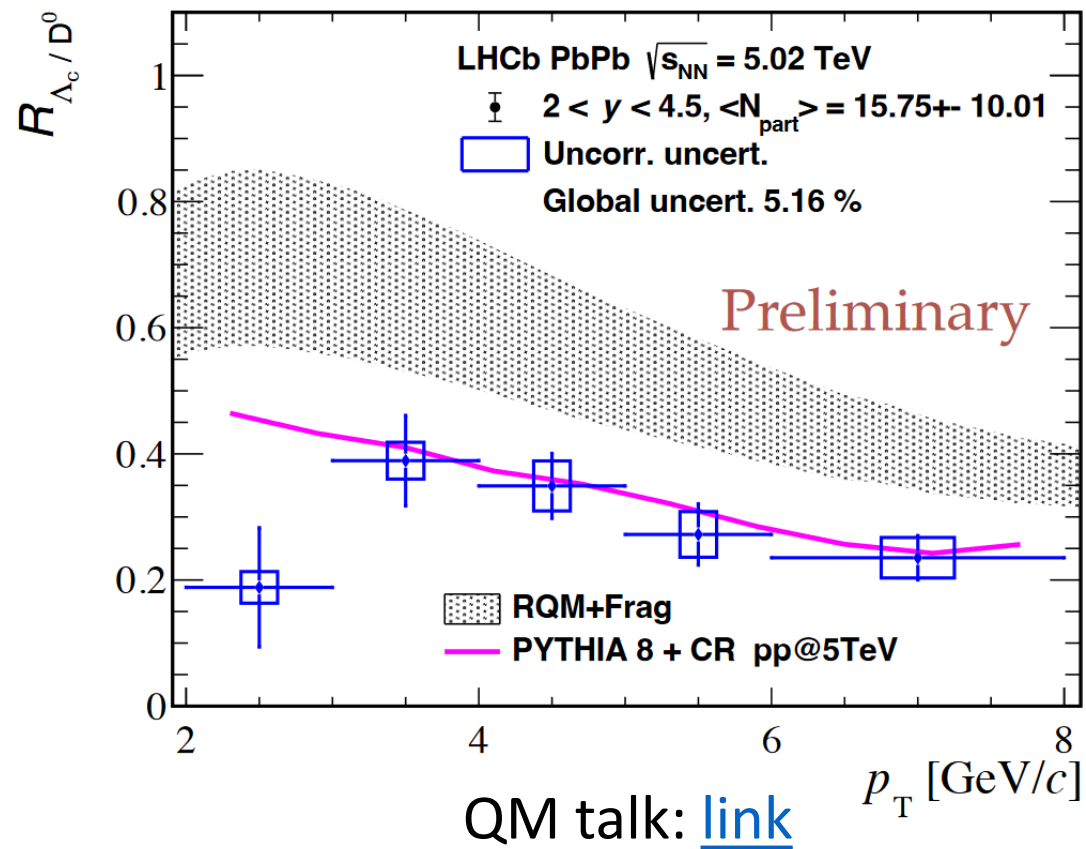
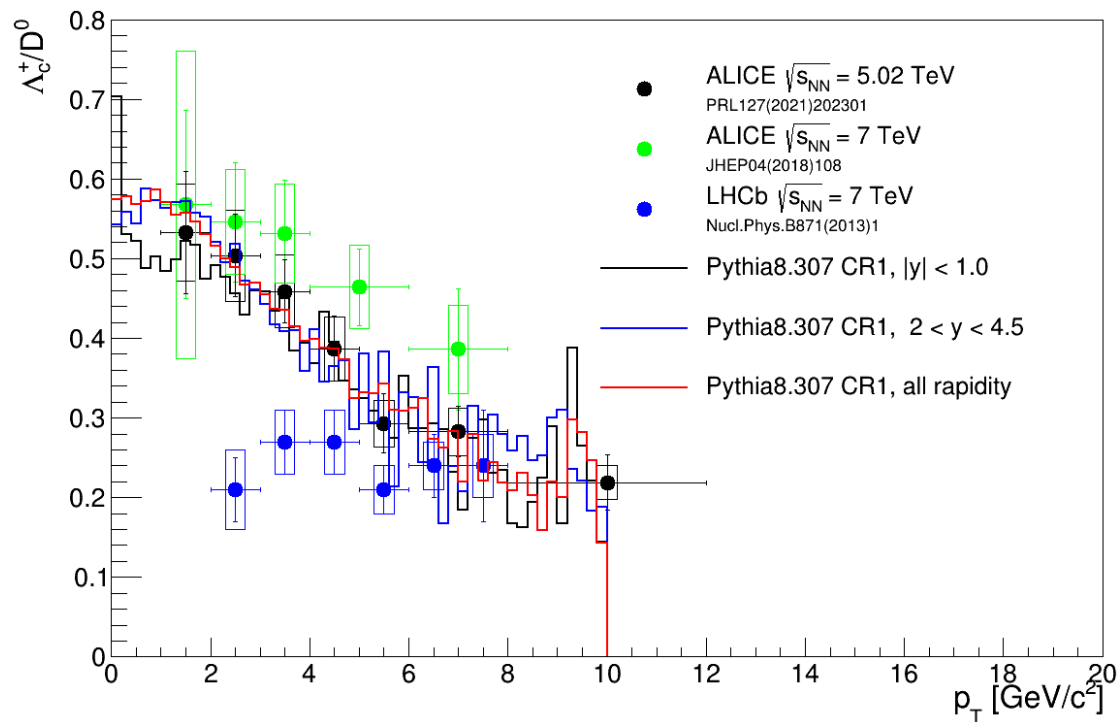


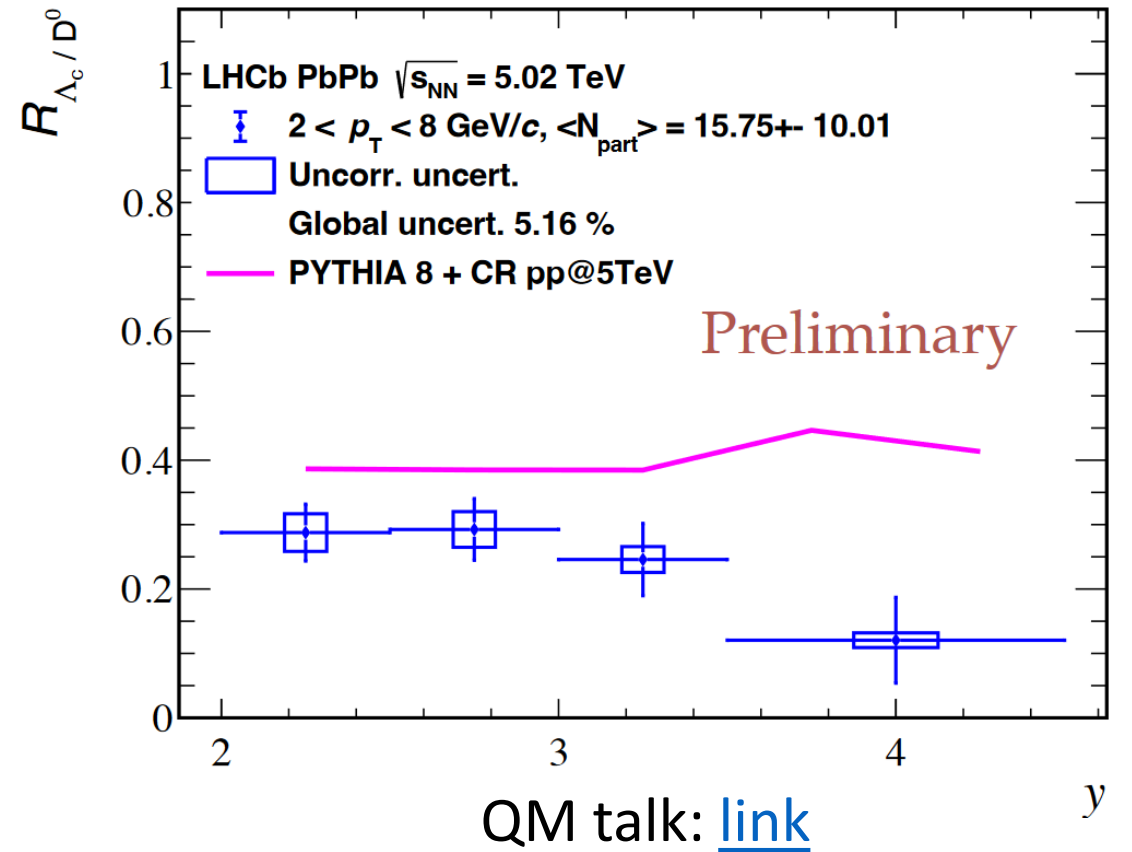
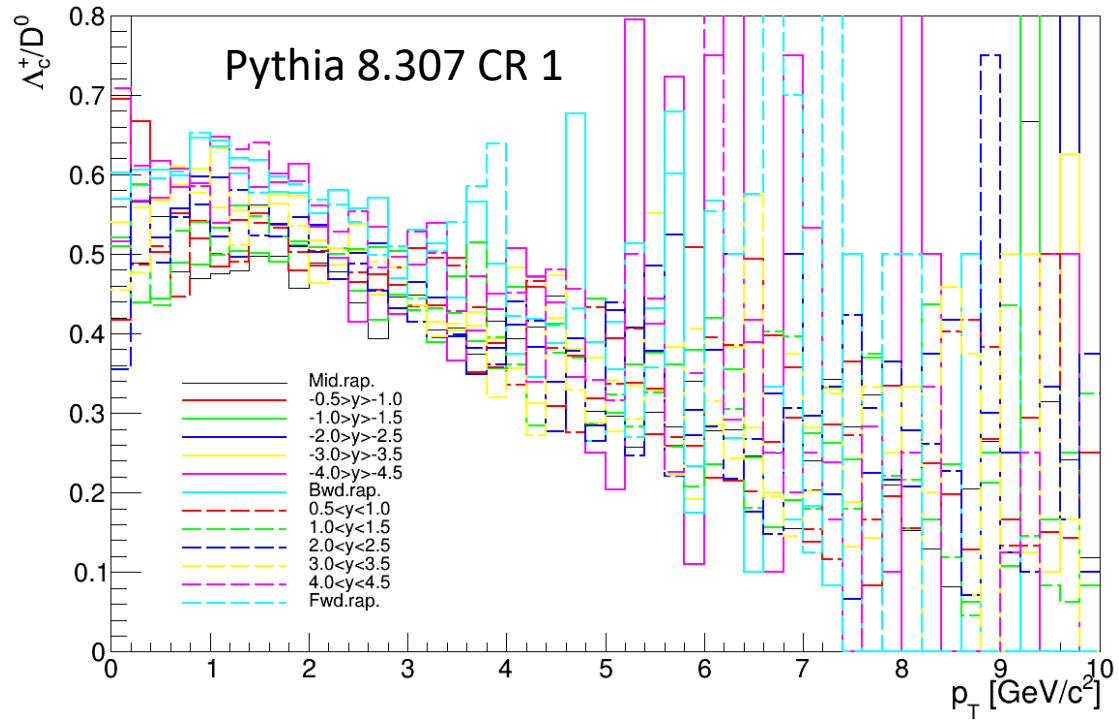
Updates on Λ_c^+ / D^0
Pythia comparison using LHCb
and ALICE data

31. 05. 2022.

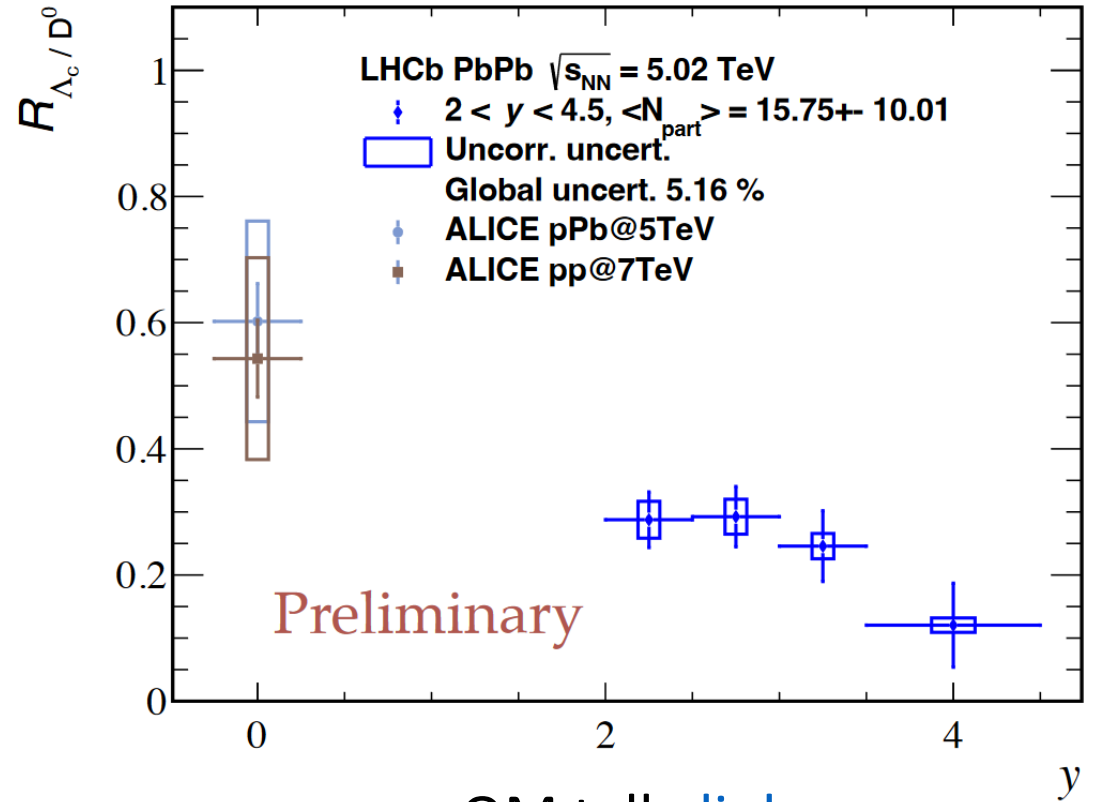
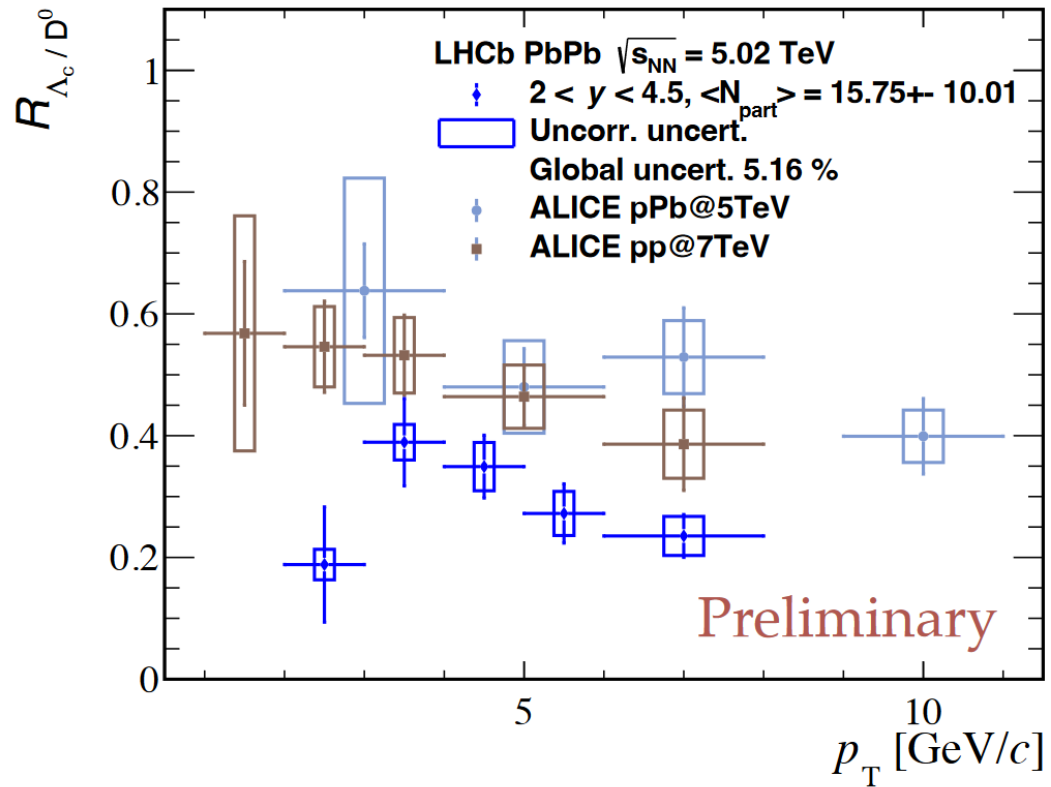
HonexComb meeting



Decreasing trend with p_T pp @ 7 TeV ?



No strong rapidity dependence from Pythia



QM talk: [link](#)

Summary

- No strong rapidity dependence observed nor in Pythia, neither in LHCb
- p_T trends are similar in ALICE and LHCb
- ALICE and LHCb still don't agree in different rapidity regions
 - We had discussion with LHCb people, they are confident about the results
 - LHCb pp @ 13 TeV is upcoming (ALICE already has such analysis, direct comparison!)
 - Time for modelling and deeper understanding

Backup – few details of the simulations

- Using the setting from Christian Berliech
- 10M pp events @ 5.02 TeV, rapidity selection, fluctuations are present but the general trend is more or less visible
- `mayDecay==false` for Λ_c^+ and D^0 at the moment, hence the yields are overestimated but the ratio seems to be reasonable