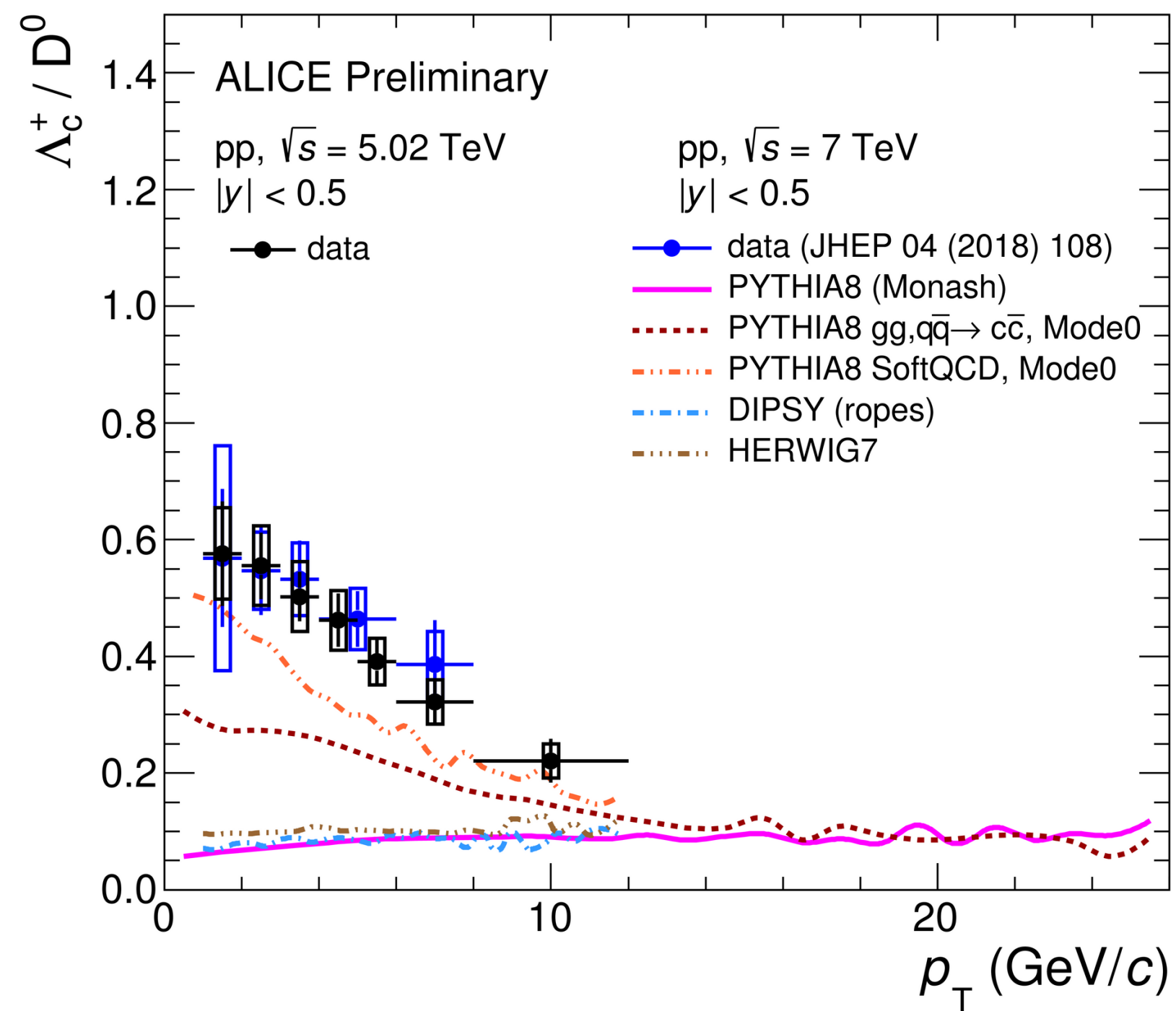


Studying charm hadronization ...



Λ_c/D in pp



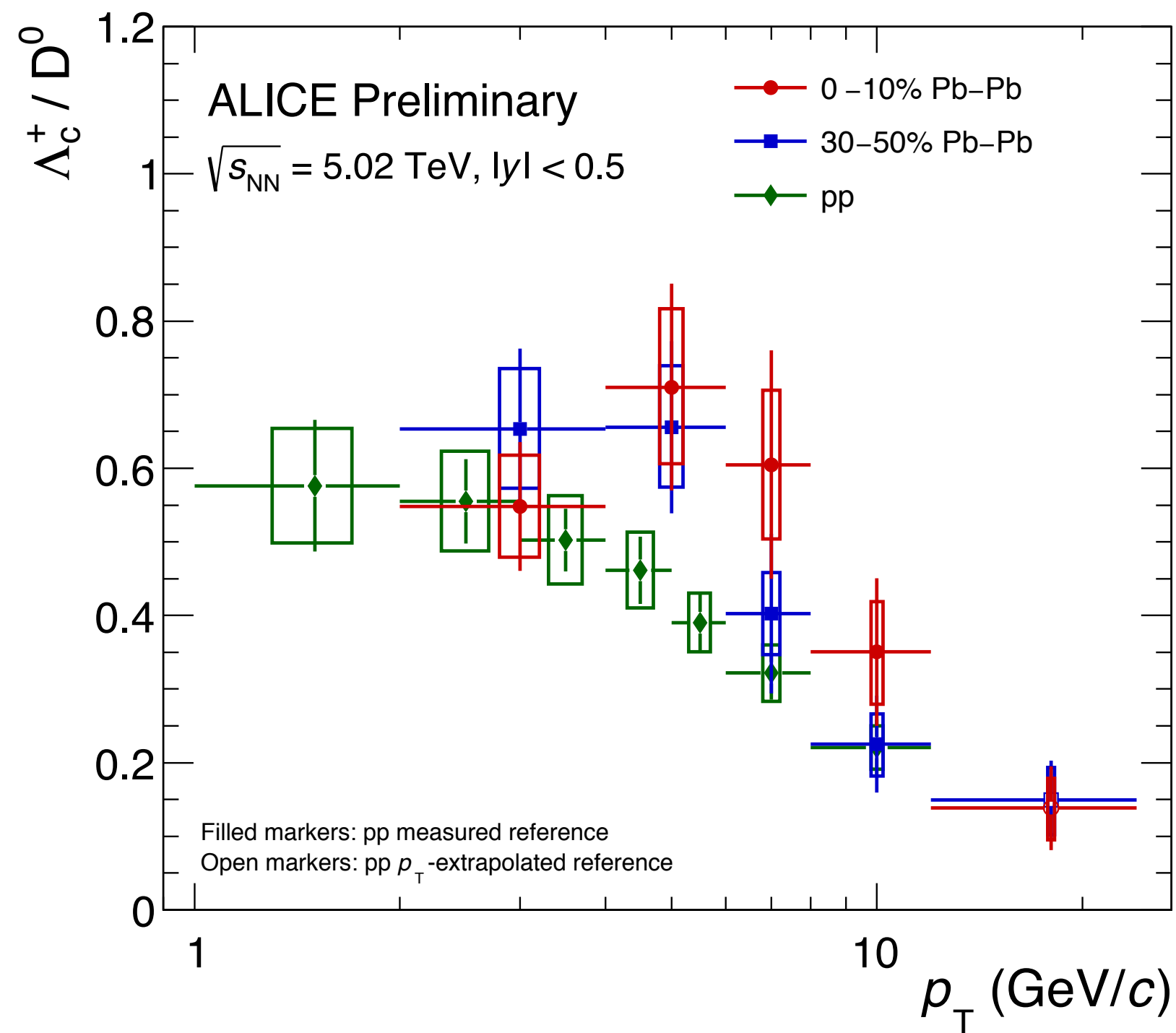
Charm baryon-to-meson ratio in pp: factor ~ 3 larger ($p_T < 5$ GeV/c) than what expected from e^+e^- collisions:
Challenge for universality of the fragmentation functions? -> z-value measurement needed to conclude

ALI-DER-314630

Studying charm hadronization ...



Λ_c/D in pp, Pb-Pb



Charm baryon-to-meson ratio in pp: factor ~ 3 larger ($p_T < 5$ GeV/c) than what expected from e^+e^- collisions:
Challenge for universality of the fragmentation functions? \rightarrow **z-value measurement needed to conclude**

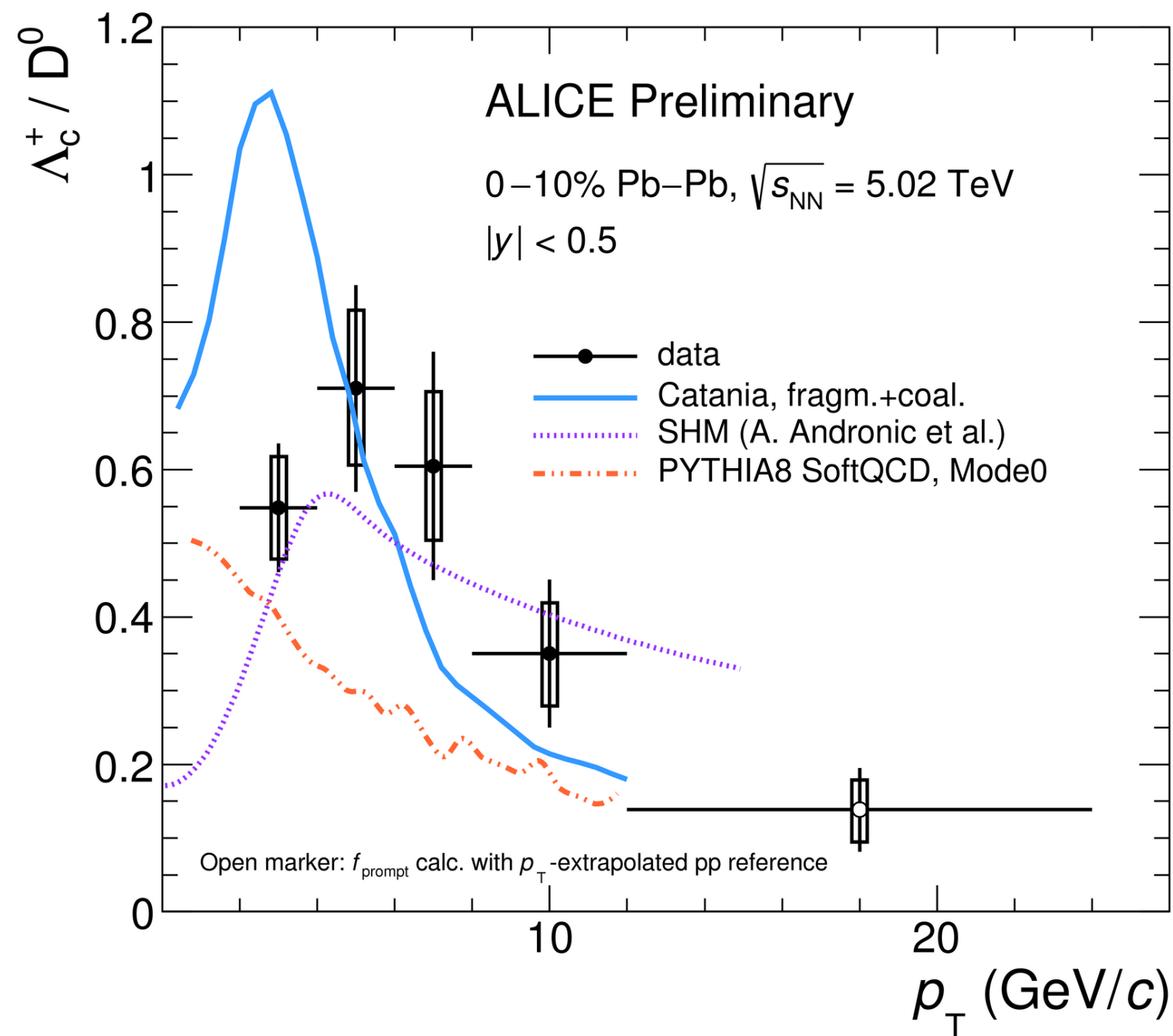
Charm baryon-to-meson ratio in Pb-Pb: Similar results as in pp but slightly larger

ALI-PREL-323761

Studying charm hadronization ...



Λ_c/D in Pb-Pb



Charm baryon-to-meson ratio in pp: factor ~ 3 larger ($p_T < 5$ GeV/c) than what expected from e^+e^- collisions:
Challenge for universality of the fragmentation functions? -> **z-value measurement needed to conclude**

Charm baryon-to-meson ratio in Pb-Pb: Similar results as in pp but slightly larger

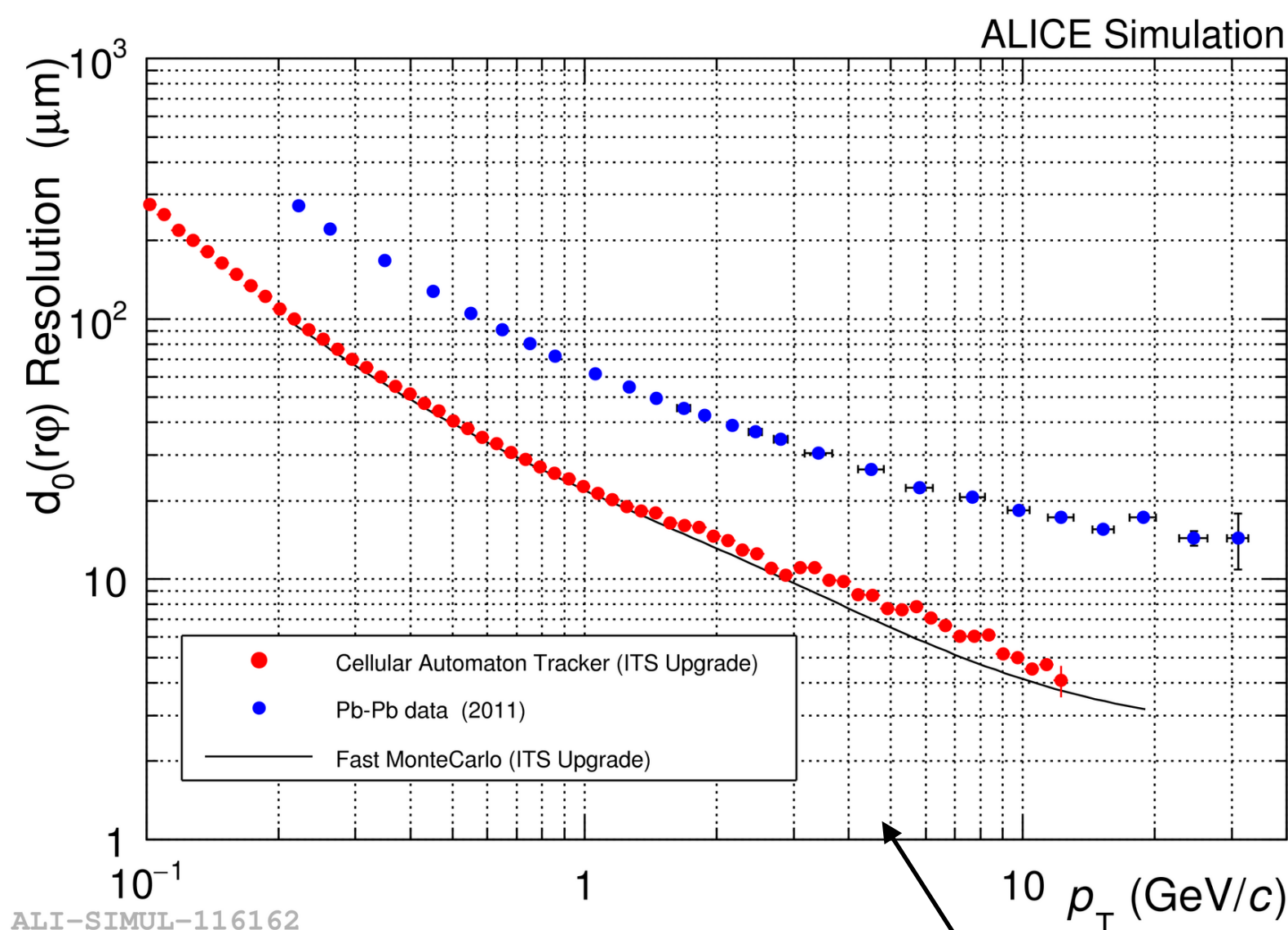
Charm baryon-to-meson ratio in Pb-Pb: Does hadronization via recombination play a role? or “just” fragmentation? -> **need more precision (stat. and syst)**

ALI-PREL-325749

Studying charm hadronization ...



ALICE upgrade: new tracker



Charm baryon-to-meson ratio in pp: factor ~ 3 larger ($p_T < 5 \text{ GeV}/c$) than what expected from e^+e^- collisions:
Challenge for universality of the fragmentation functions? \rightarrow **z-value measurement needed to conclude**

Charm baryon-to-meson ratio in Pb-Pb: Similar results as in pp but slightly larger

Charm baryon-to-meson ratio in Pb-Pb: Does hadronization via recombination play a role? or “just” fragmentation? \rightarrow need more precision to conclude (stat. and syst)

ALICE upgrade: Future is coming fast and soon we will be able to collect and analyse LHC run III data \rightarrow **Nikhef among the main players on ALICE tracker upgrade**

Factor 3 improvement in $r-\phi$ resolution: $\sim 20 \mu\text{m}$ at $1 \text{ GeV}/c$ in Pb-Pb!