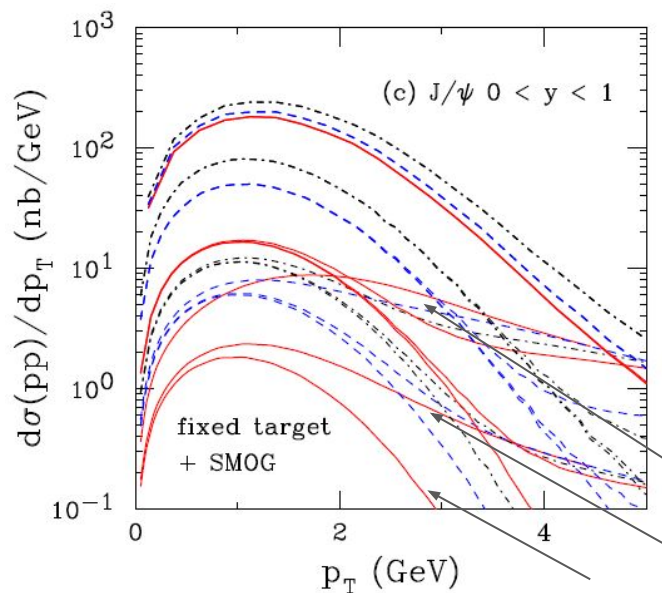


Intrinsic charm - prospects ?

SMOG: Gas jet target in LHCb, J/ψ and D^0 measured at backward rapidity in the fixed-target center of mass, data so far at: $p + \text{Ne}$ at $\sqrt{s_{NN}} = 68.5$ GeV; $p + \text{He}$ at $\sqrt{s_{NN}} = 86.6$ GeV; and $p + \text{Ar}$ at $\sqrt{s_{NN}} = 110.4$ GeV

NA60+: proton beams at $p_{\text{lab}} = 40, 80, \text{ and } 120$ GeV, nuclear targets from Be to Pb

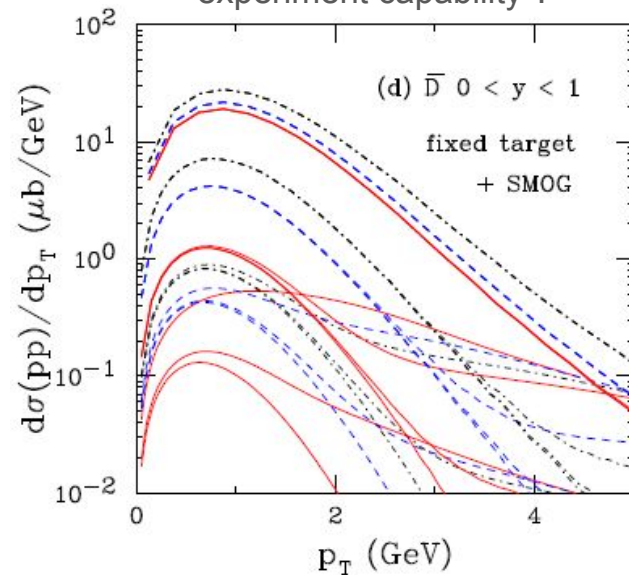


pp vs pA ?
Is pBe a proxy for pp?

Larger effect at low energy ?

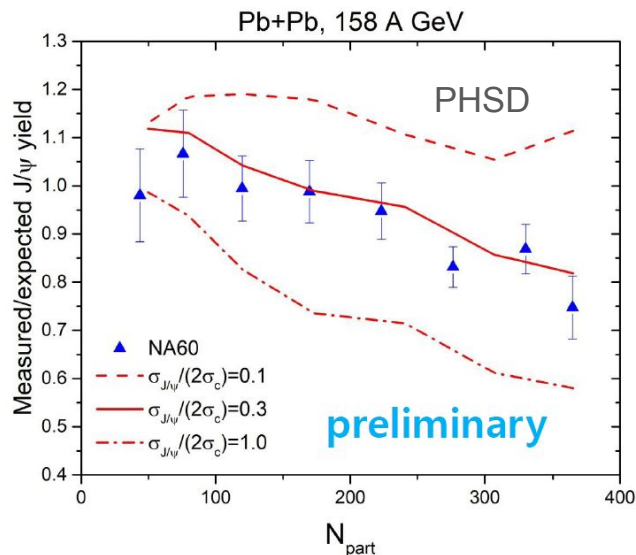
How/can we prove/disprove IC ?
A background for "QCD" open charm measurements ?

D^0 vs J/ψ ?
Only a matter of experiment capability ?



Charmonia in NA60+/DiCE and CBM

- Can a **threshold** for hot matter effects be observed when lowering collision energy, possibly separately for χ_c and $\psi(2S)$ feed-down ?
- Are **there specific μ_B -related effects**, with a quark excess influencing the dissociation process ?
- Can **comover vs QGP** effects be separated when studying the \sqrt{s} -dependence of the suppression ?
- Can we understand the mechanisms at play for **dissociation in CNM** ?



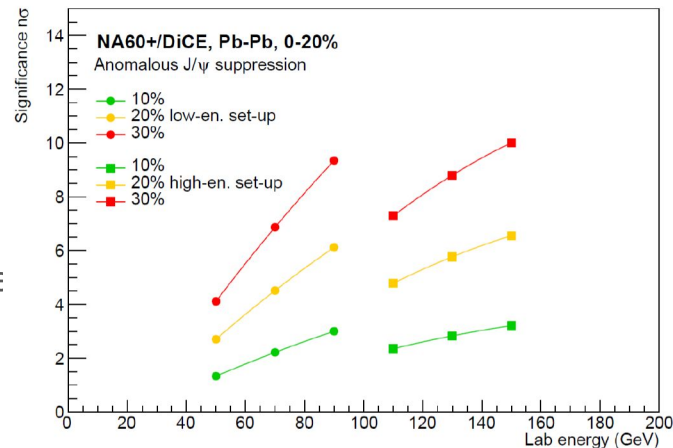
Can reliable estimates at lower collision energies be performed ?

Treatment of CNM effects ?

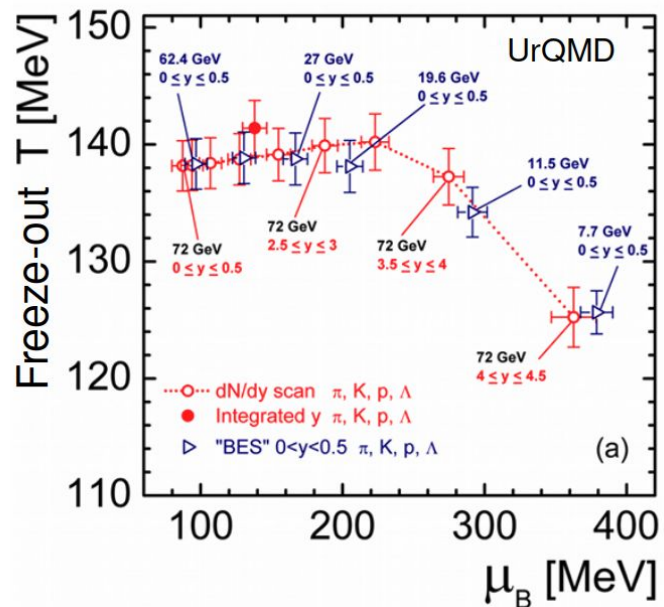
Will Fermi motion alter the picture at low energy ?

Will extrapolation of CNM to $A=1$ work for RAA calculations ?

Is RAA still the “good” quantity ?



SMOG, between collider and SPS/FAIR



LHCb SMOG: $-2.3 < y < 0.7$

Has/can this be worked out at SPS/FAIR energies, in spite of narrower acceptance ?

