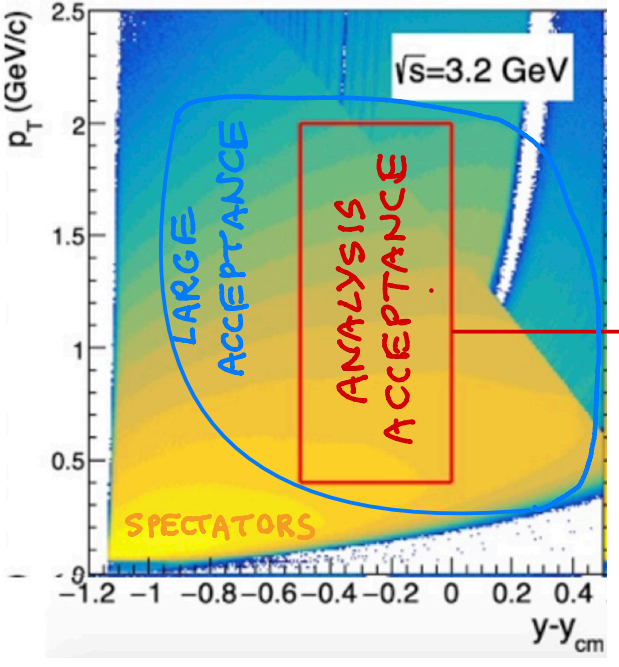
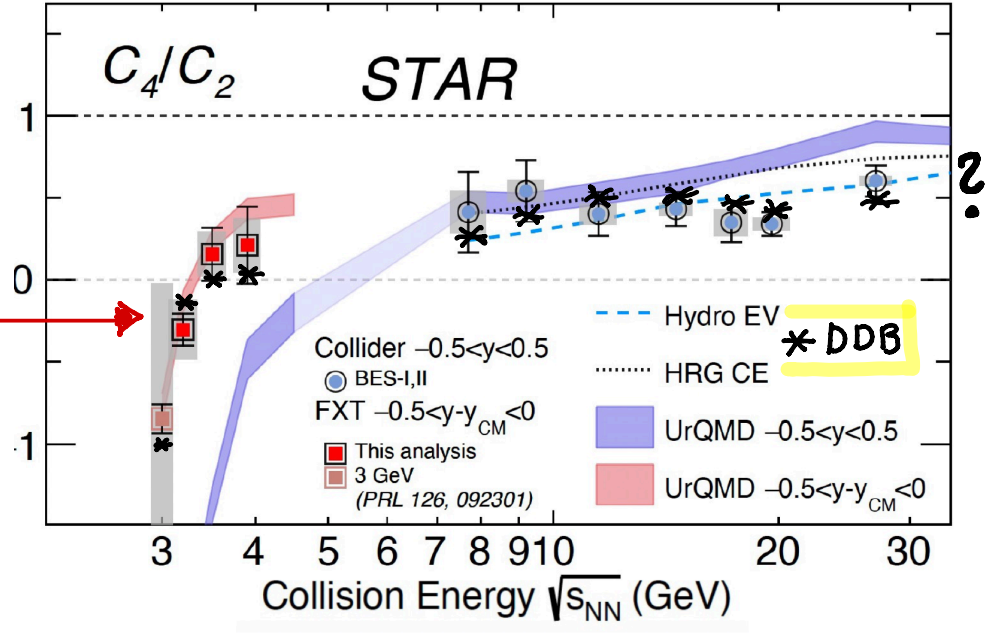
DATA-DRIVEN BASELINE (DDB) FOR CP SEARCH

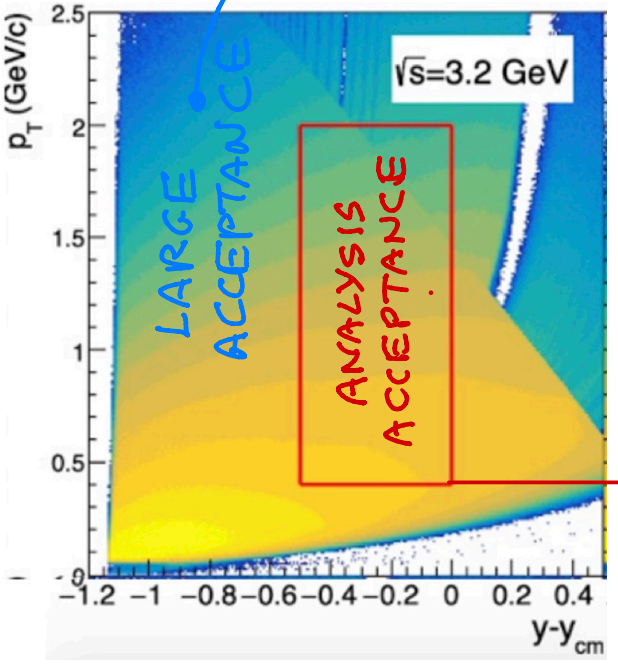
MAREK



AA C LA



THE PROCEDURE TO CALCULATE DDB



MULTIPLICITY DISTRIBUTION $P_{LA}(N)$
SINGLE PARTICLE SPECTRA $g_{LA}(\vec{p})$

THE DDB MODEL

$P_{LA}(N),\ g(\vec{p}_1 .. \vec{p}_N) = g(\vec{p}_1) \cdots g(\vec{p}_N)$
(MC: EVENT MIXING)

$P_{AA}(N)$ IN ANALYSIS ACCEPTANCE

DDB C_4/C_2 IN AA

DATA C_4/C_2 IN AA

AND SO ON...

ADVANTAGES:

- DDB INCLUDES VOLUME FLUCTUATIONS (NO NEED TO CORRECT FOR VF*)
- DDB INCLUDES GLOBAL MATERIAL CONSERVATION LAWS (NEW)
- ...

REFERENCE MODEL:

IDEAL GAS
+ CANONICAL ENSEMBLE
+ VOLUME FLUCTUATIONS
⇓
MODEL = DDB

CHALLENGES:

- INCLUDE IN DDB TWO (MULTIPARTICLE) EFFICIENCY (ANY BASELINE SHOULD INCLUDE IT)
- ...

* OTHER METHODS TREATING VOLUME FLUCTUATIONS:

- STRONGLY INTENSIVE QUANTITIES (nG^2+...)
- WNM UNFOLDING (ANAR, JOACHIN, ROMAIN, VOLKER ...)