

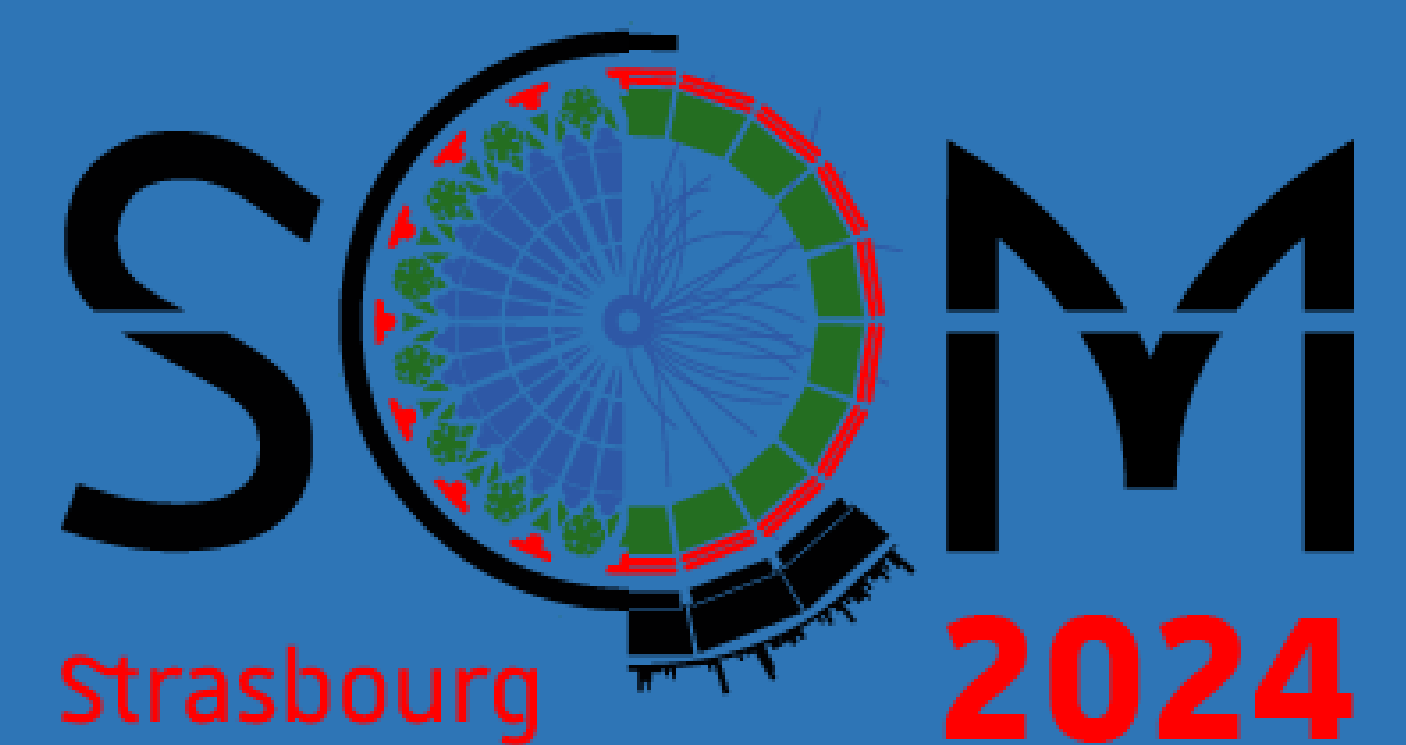
Lambda baryon production in heavy-ion collisions

at the NA61/SHINE experiment

Yuliia Balkova for the NA61/SHINE Collaboration

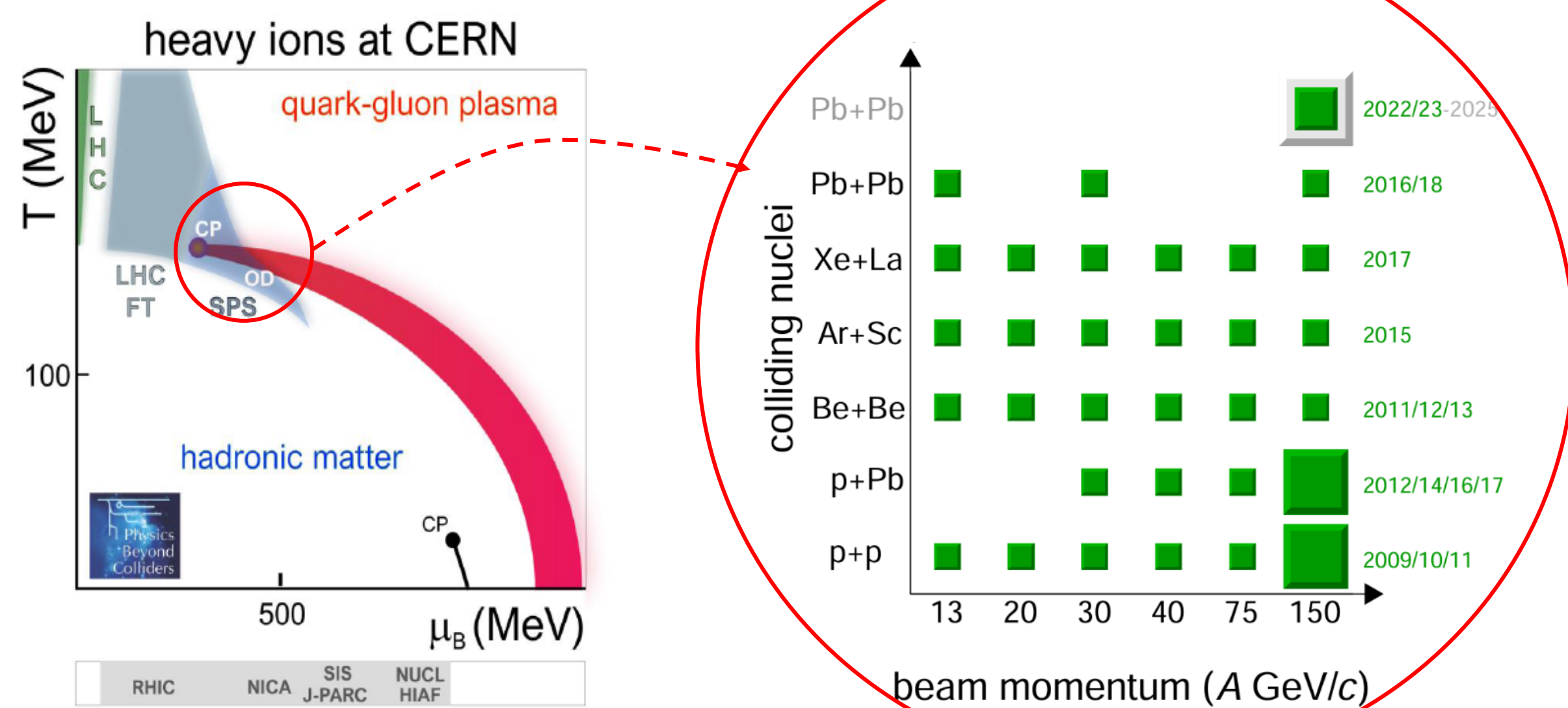
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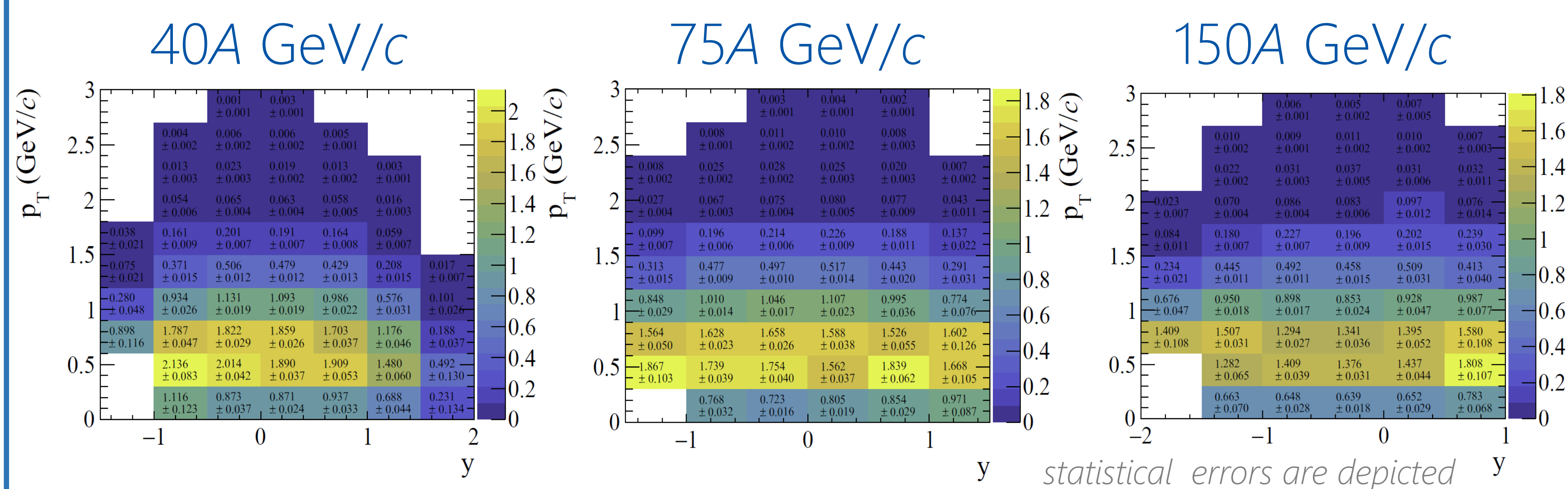
NA61/SHINE two-dimensional scan

NA61/SHINE performed a collision energy and system size 2D scan to study the phase diagram of strongly interacting matter. Strangeness production ($K^\pm, \Lambda, K_S^0 \dots$) is one of the most valuable probes of the onset of deconfinement.

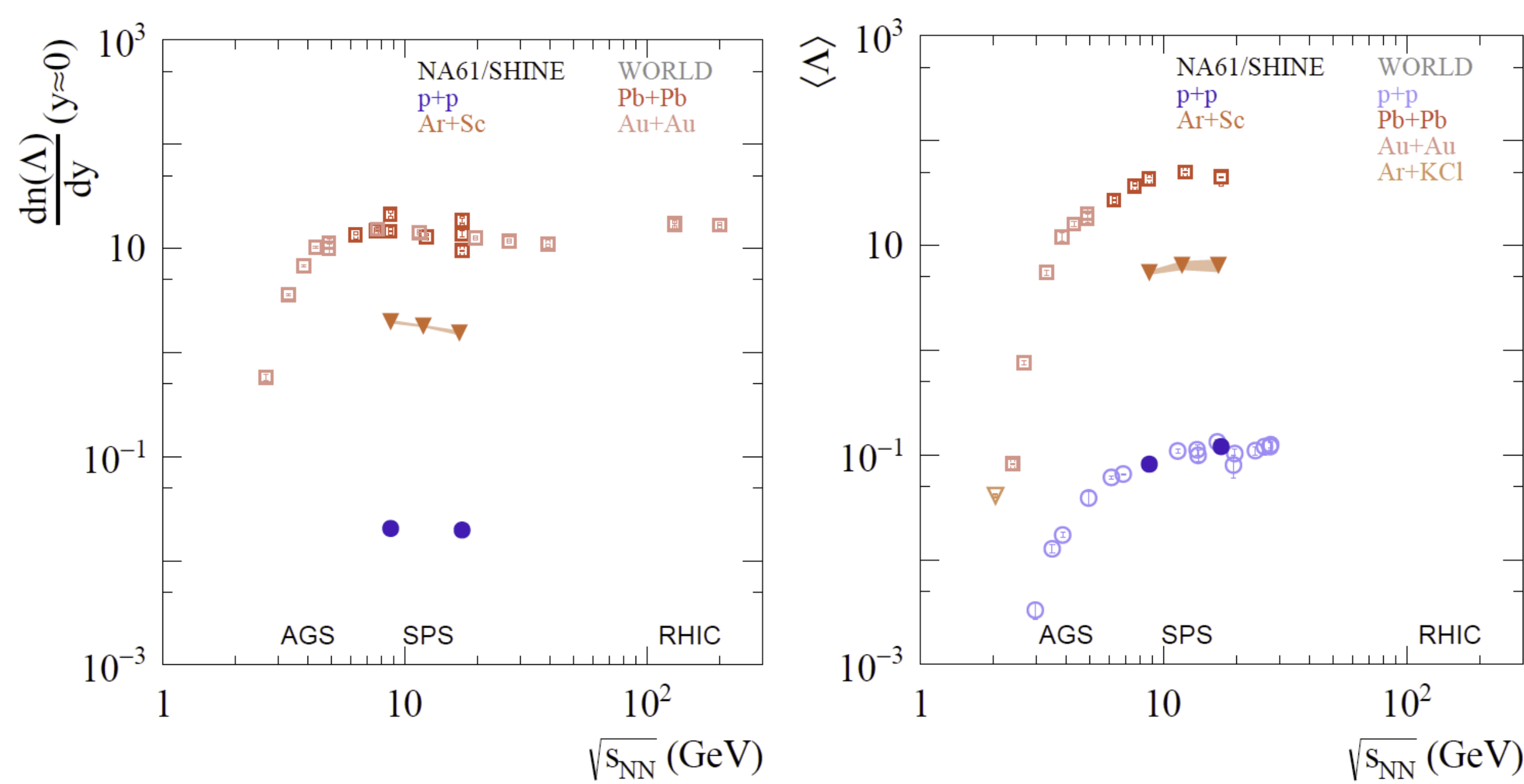
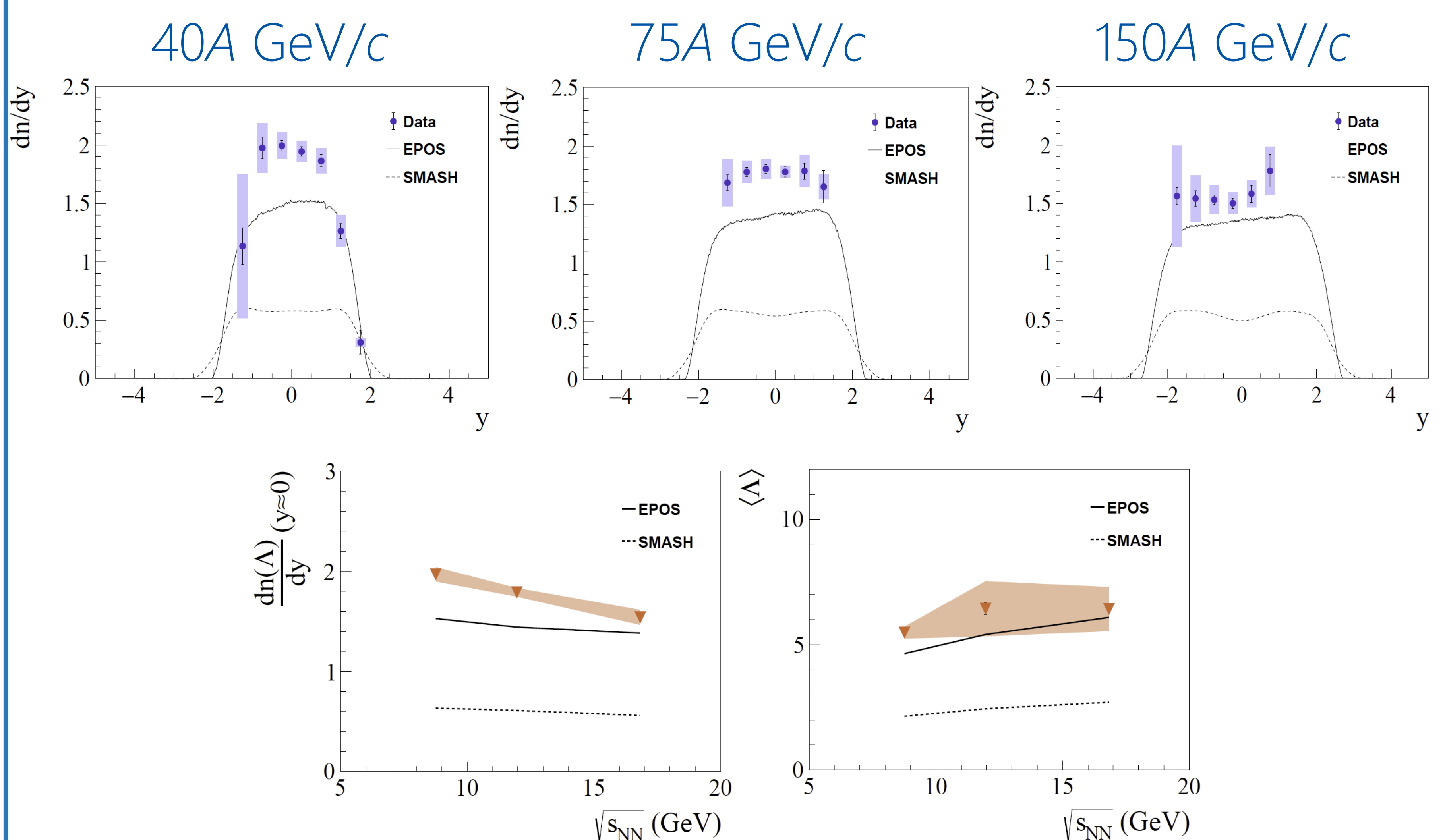


Λ production in 0-10% central Ar+Sc collisions

$$\frac{d^2n}{dydp_T}$$
 spectra

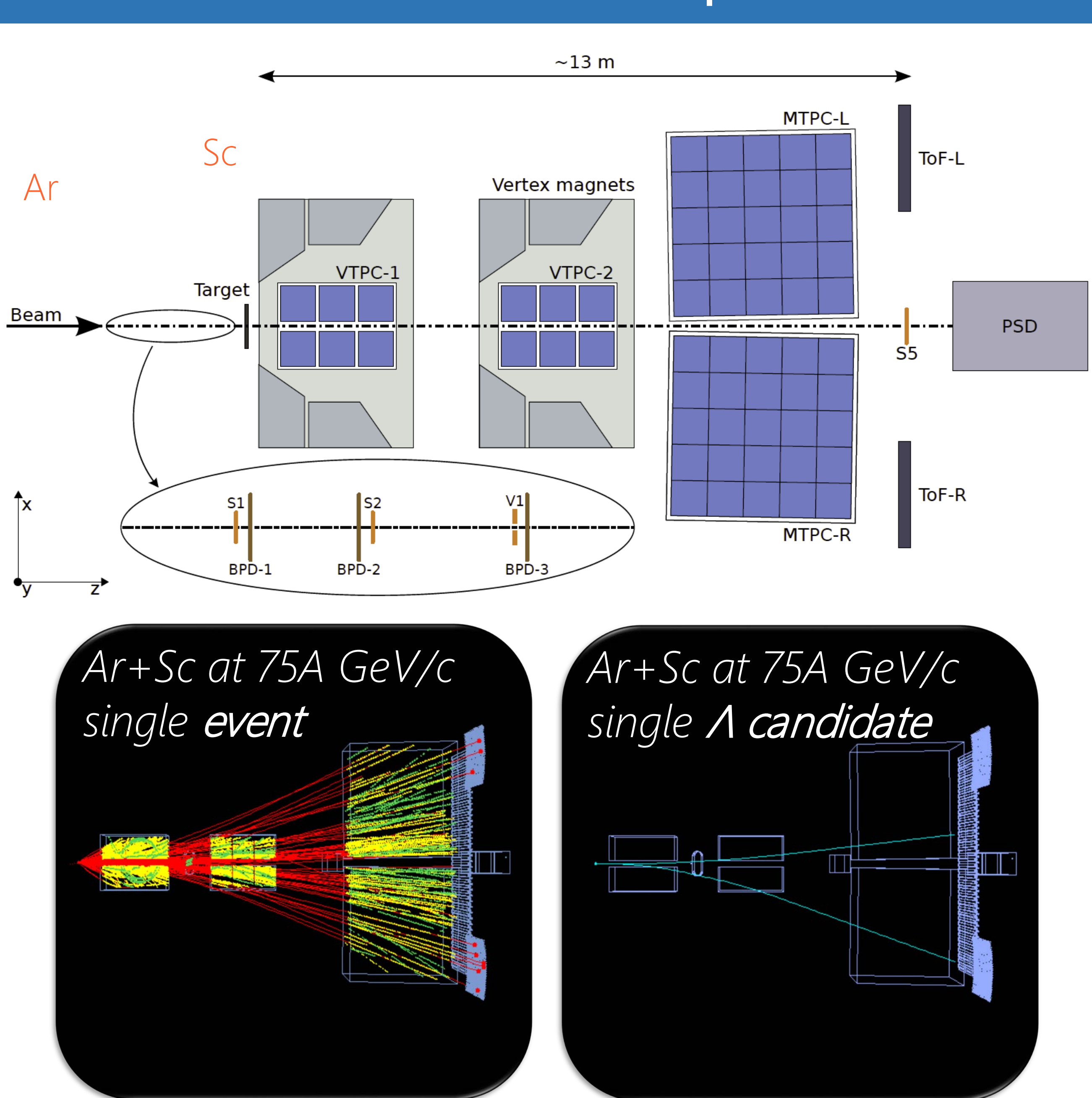


Rapidity spectra and mean multiplicities

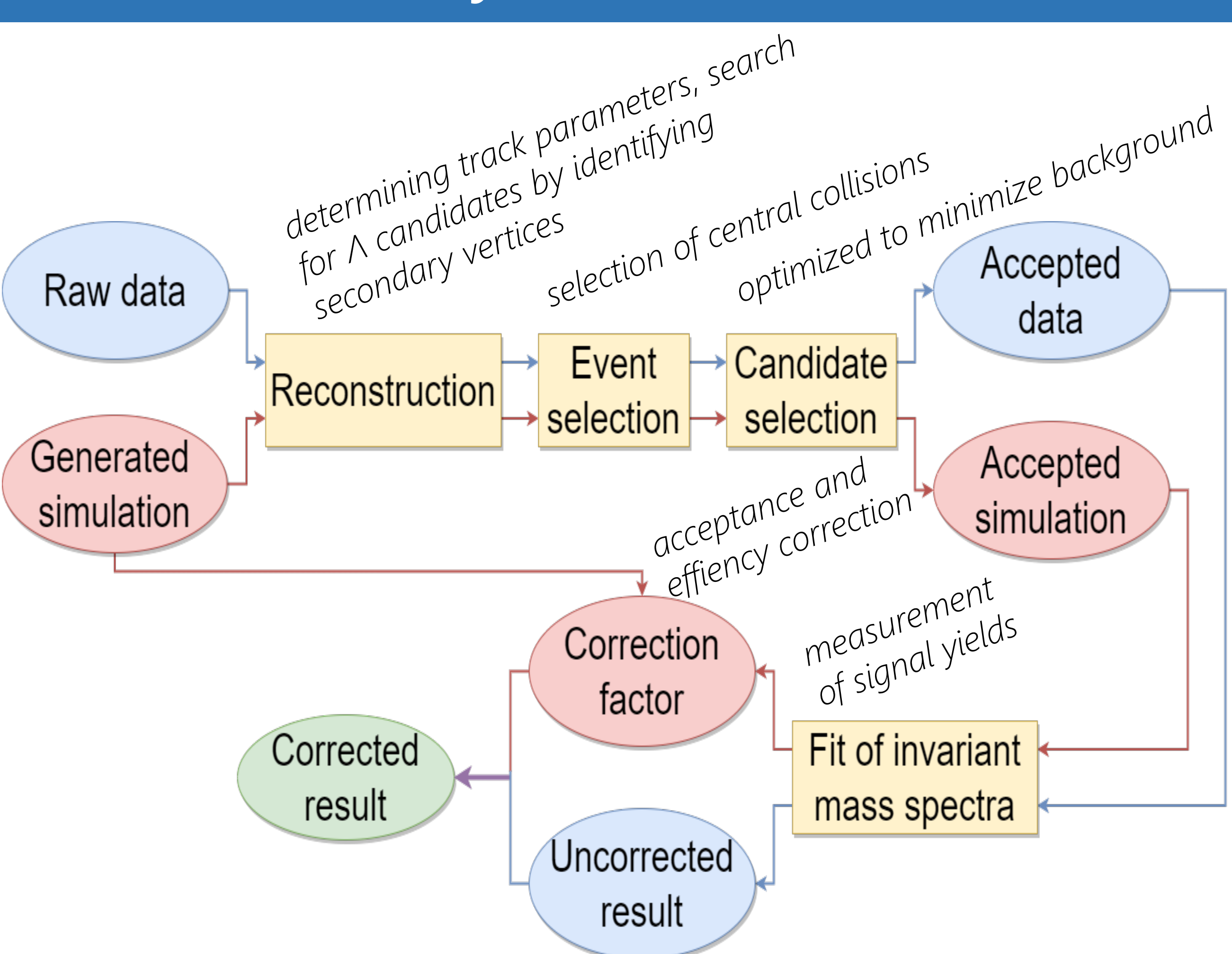


NA61/SHINE data:
p+p (158 GeV/c: EPJ C 76 (2016), 198;
40 GeV/c: preliminary)
Ar+Sc (preliminary)

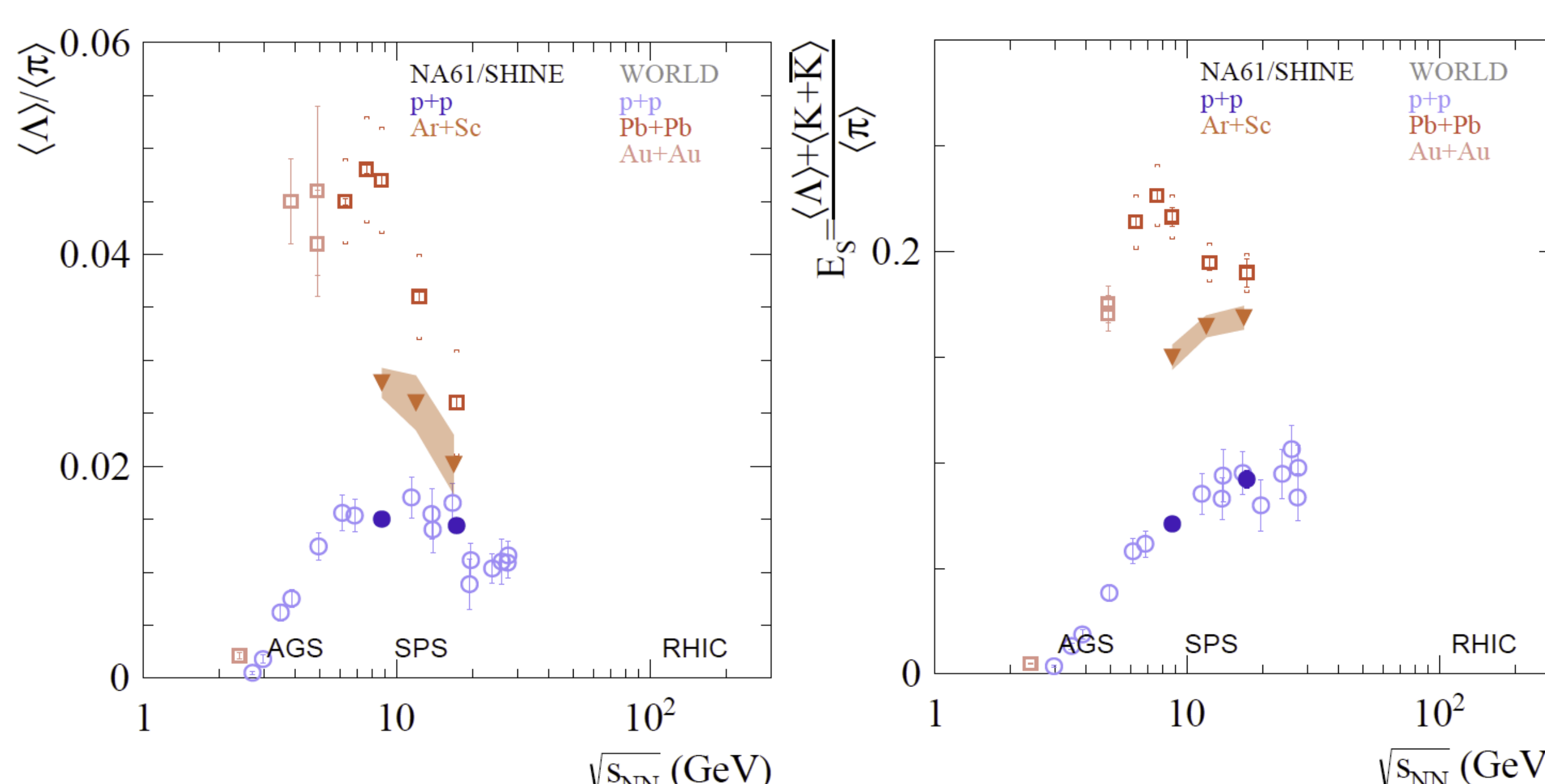
Schematic layout of the NA61/SHINE experiment



Analysis workflow



Strangeness enhancement



NA61/SHINE data:
p+p (158 GeV/c: EPJ C 76 (2016), 198;
40 GeV/c: preliminary)
Ar+Sc (preliminary)

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