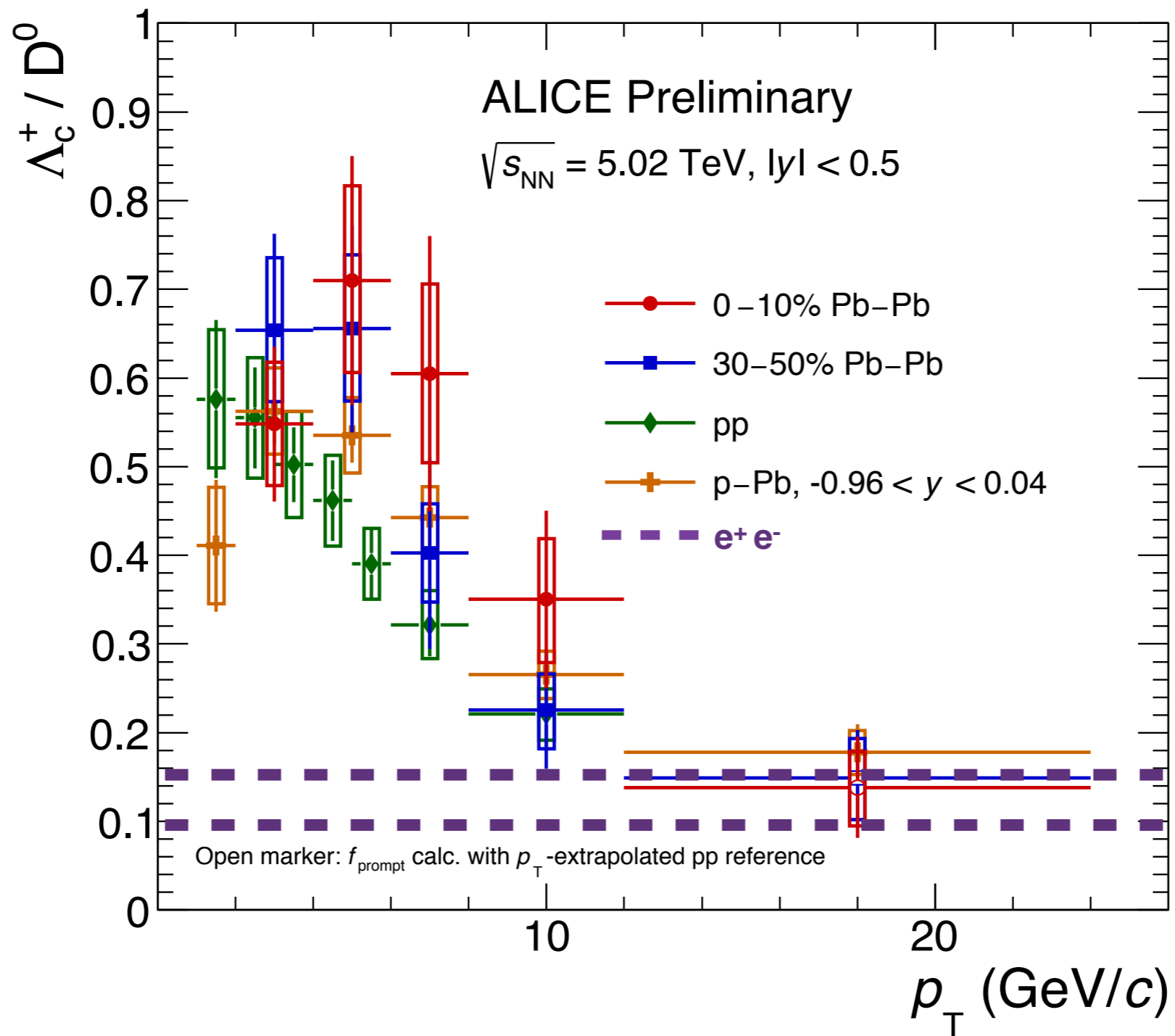


Extra material

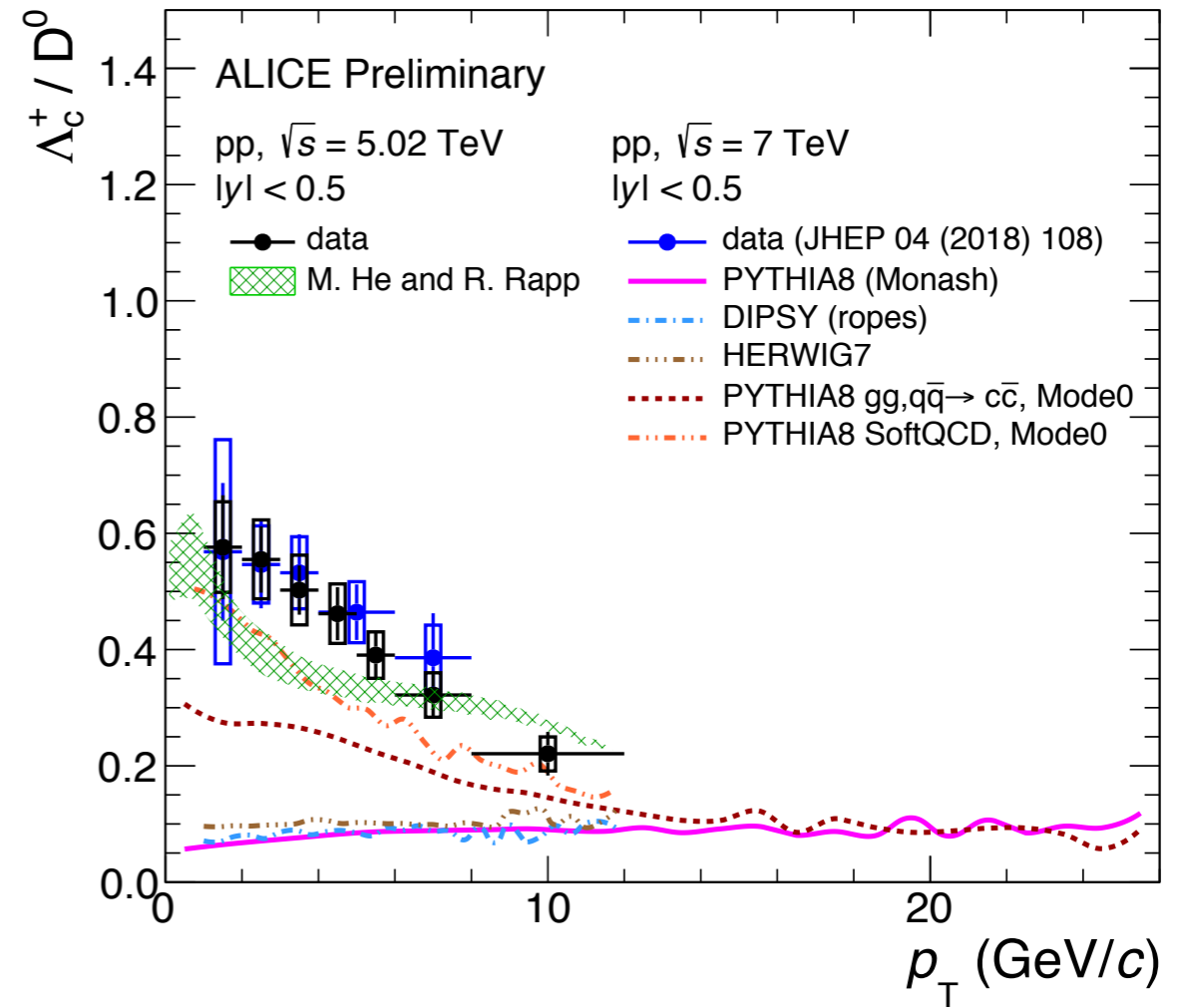
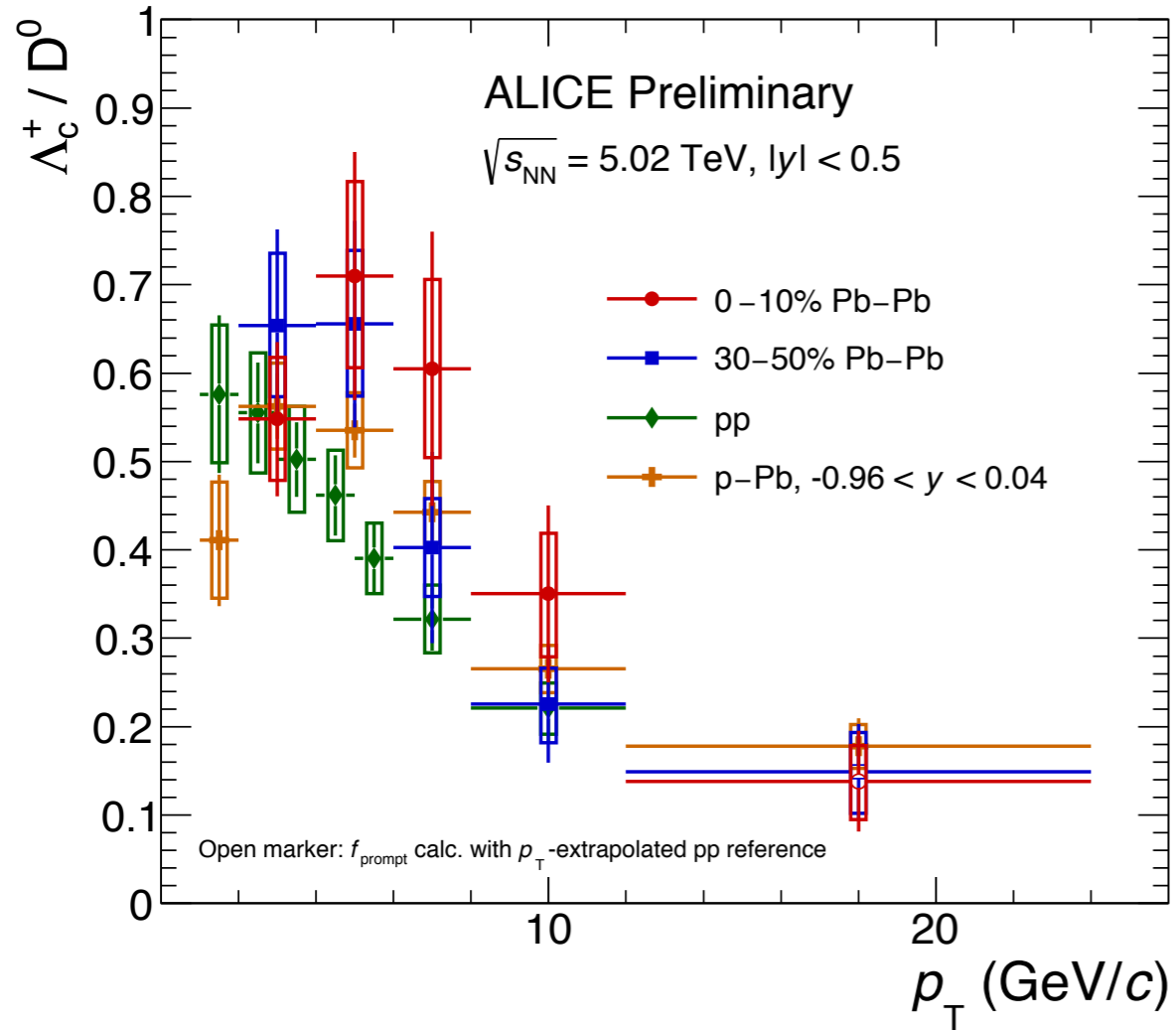
G.M. Innocenti (CERN)

Λ_c/D^0 ratios in PbPb collisions



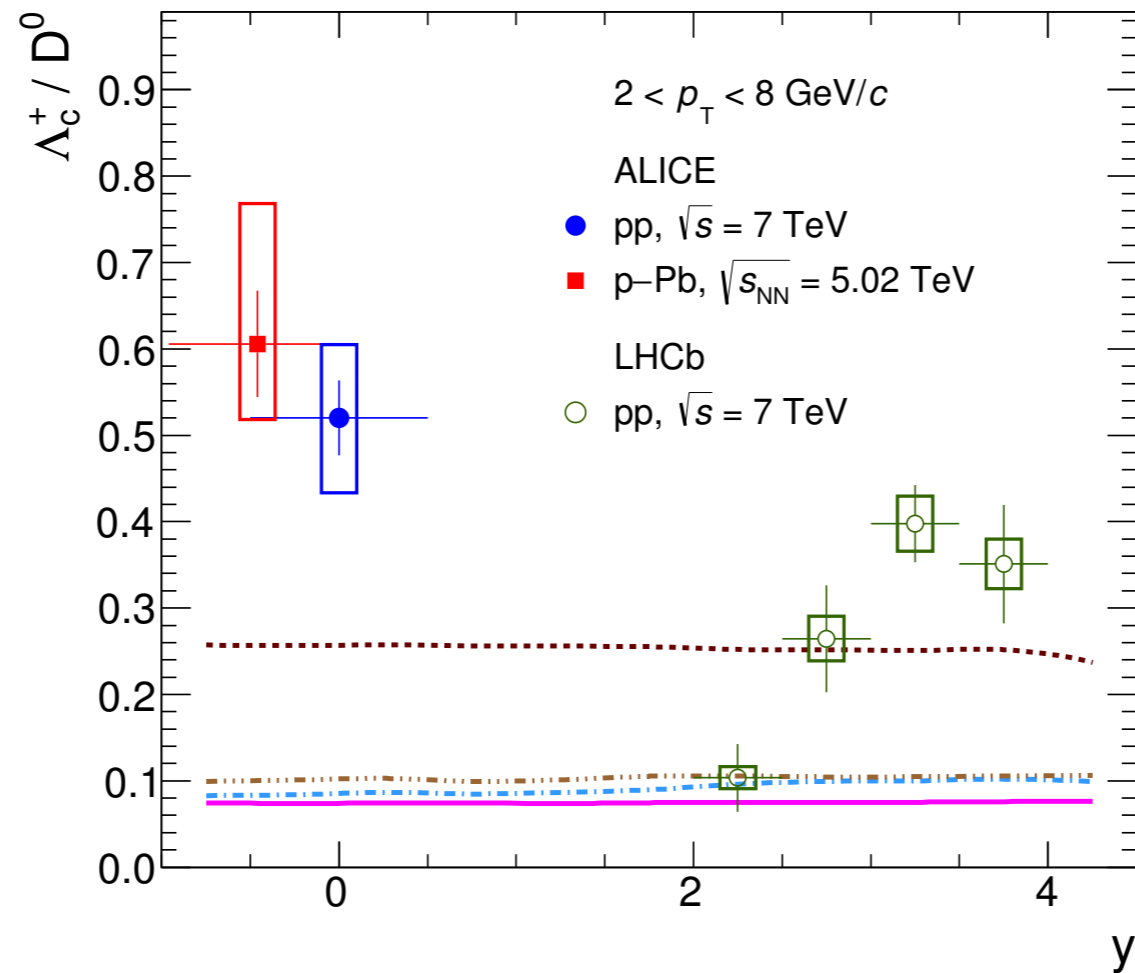
ALI-PREL-321706

Λ_c/D^0 ratios in PbPb collisions



ALI-PREL-321706

Λ_c/D^0 ratios in pp collisions

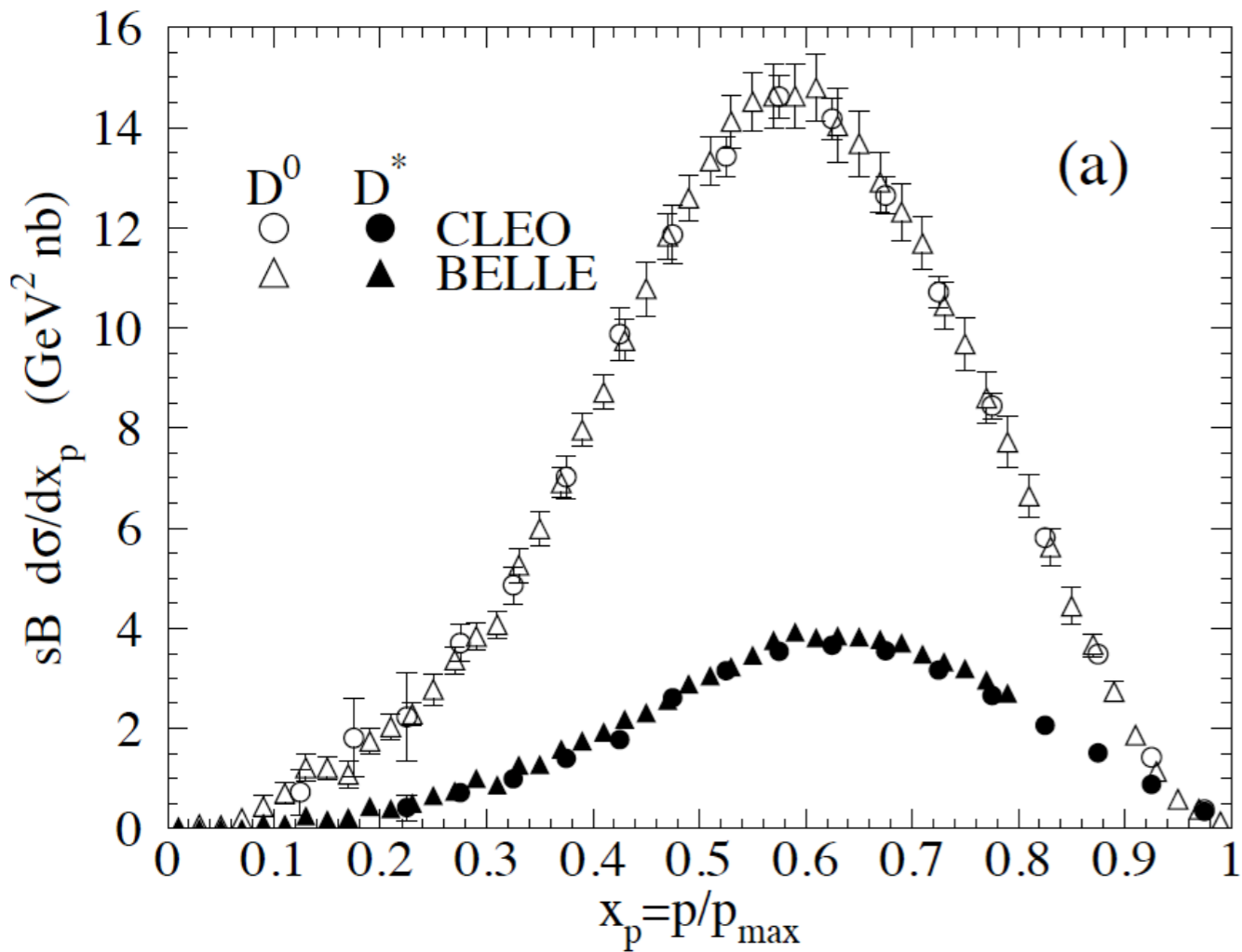


ALI-PUB-141425

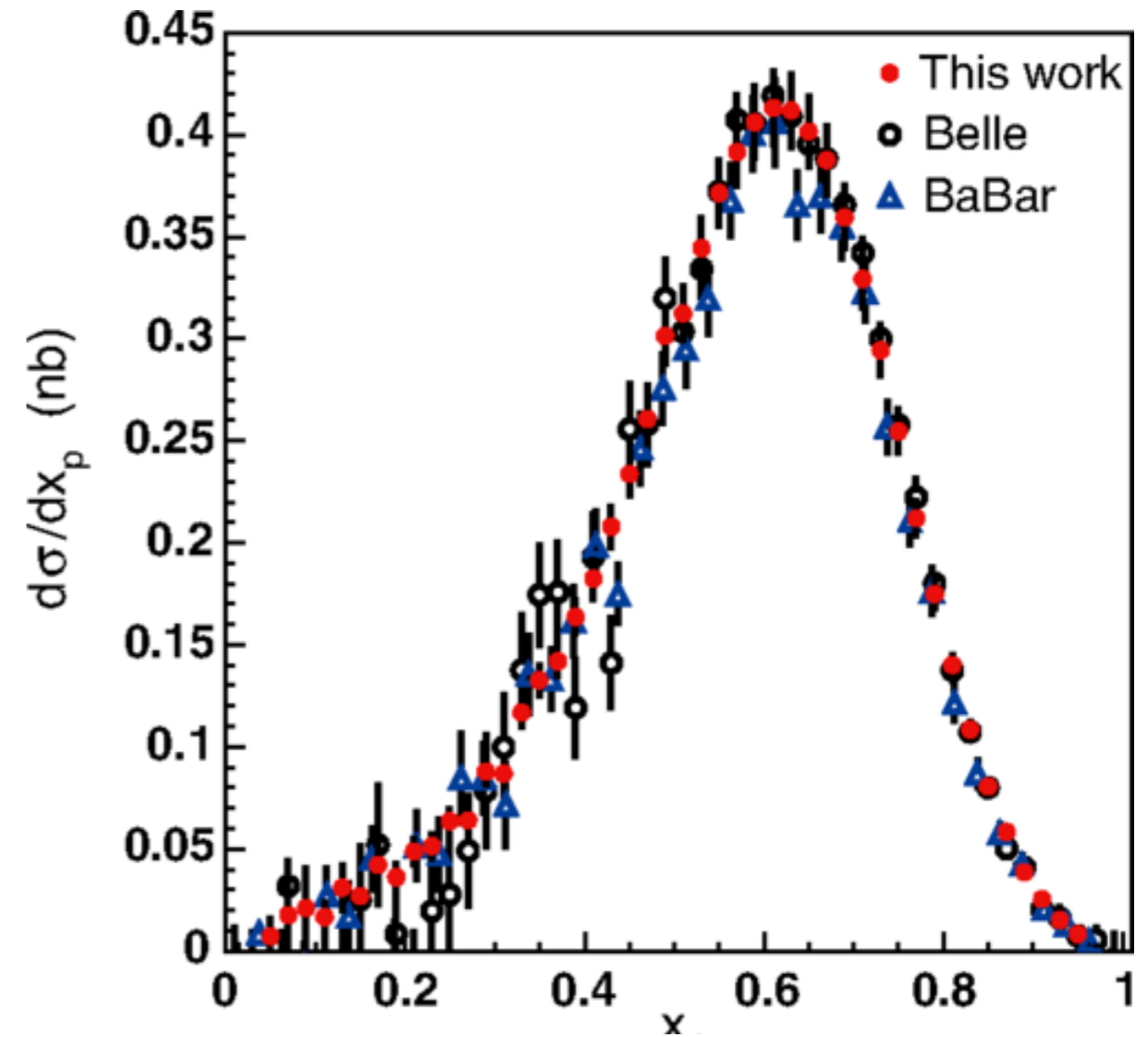
Λ_c/D^0 ratios for different colliding systems

Measurement	$\Lambda_c^+/D^0 \pm \text{stat.} \pm \text{syst.}$	System	\sqrt{s} (GeV)	Kinematics
CLEO	$0.119 \pm 0.021 \pm 0.019$	ee	10.55	
ARGUS	0.127 ± 0.031 (stat.+syst.)	ee	10.55	
LEP average	$0.113 \pm 0.013 \pm 0.006$	ee	91.2	
ZEUS DIS	$0.124 \pm 0.034^{+0.025}_{-0.022}$	ep	320	$1 < Q^2 < 1000 \text{ GeV}^2, 0 < p_T < 10 \text{ GeV}/c, 0.02 < y < 0.7$
ZEUS γp HERA I	$0.220 \pm 0.035^{+0.027}_{-0.037}$	ep	320	$130 < W < 300 \text{ GeV}, Q^2 < 1 \text{ GeV}^2, p_T > 3.8 \text{ GeV}/c, \eta < 1.6$
ZEUS γp HERA II	$0.107 \pm 0.018^{+0.009}_{-0.014}$	ep	320	$130 < W < 300 \text{ GeV}, Q^2 < 1 \text{ GeV}^2, p_T > 3.8 \text{ GeV}/c, \eta < 1.6$
ALICE	$0.543 \pm 0.061 \pm 0.160$	pp	7000	$1 < p_T < 8 \text{ GeV}/c, \eta < 0.5$
ALICE	$0.602 \pm 0.060^{+0.159}_{-0.087}$	pPb	5020	$2 < p_T < 12 \text{ GeV}/c, \eta < 0.5$

Λ_c vs D^0 $z_{||}$ in e^+e^- at 10.52 GeV

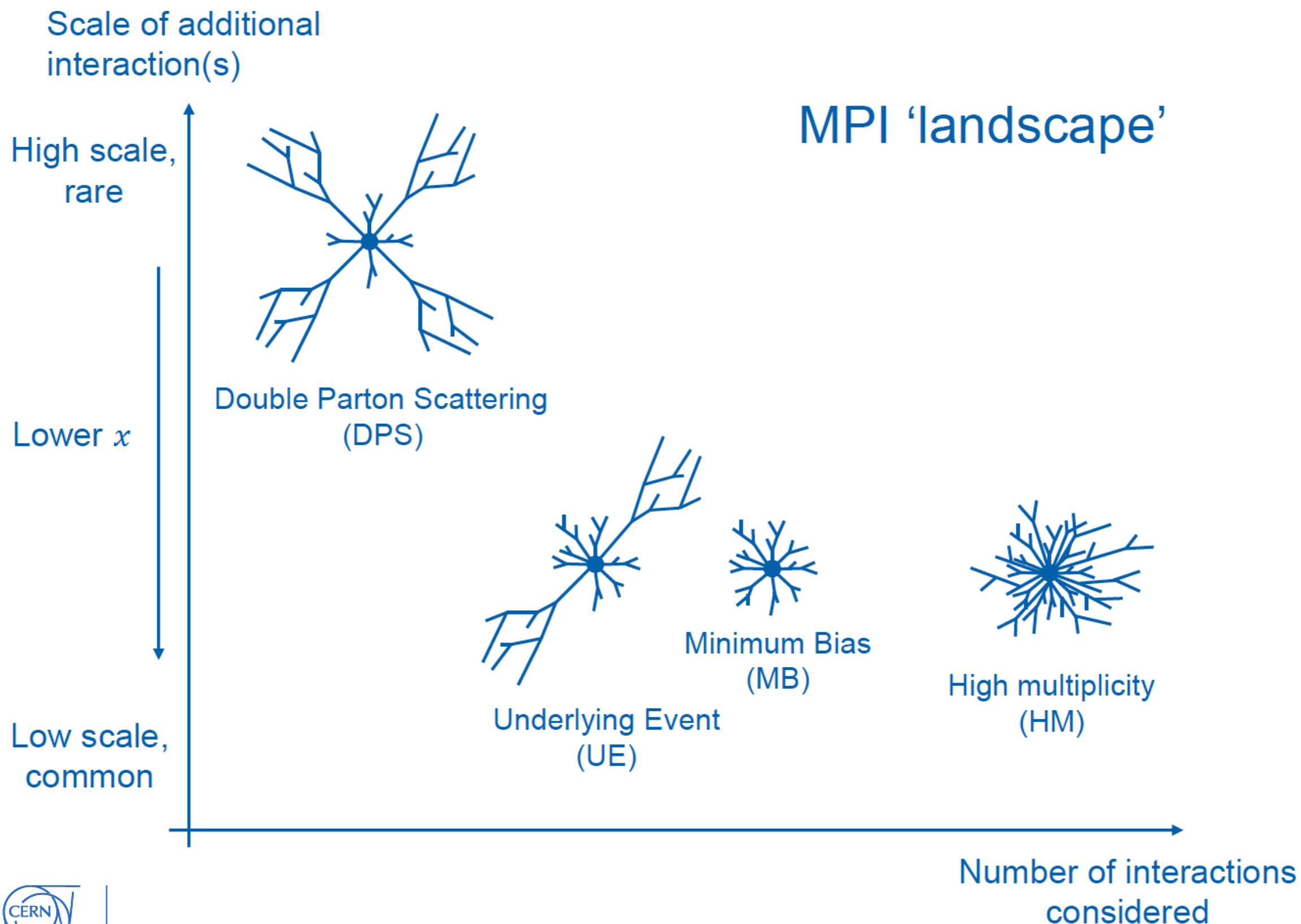


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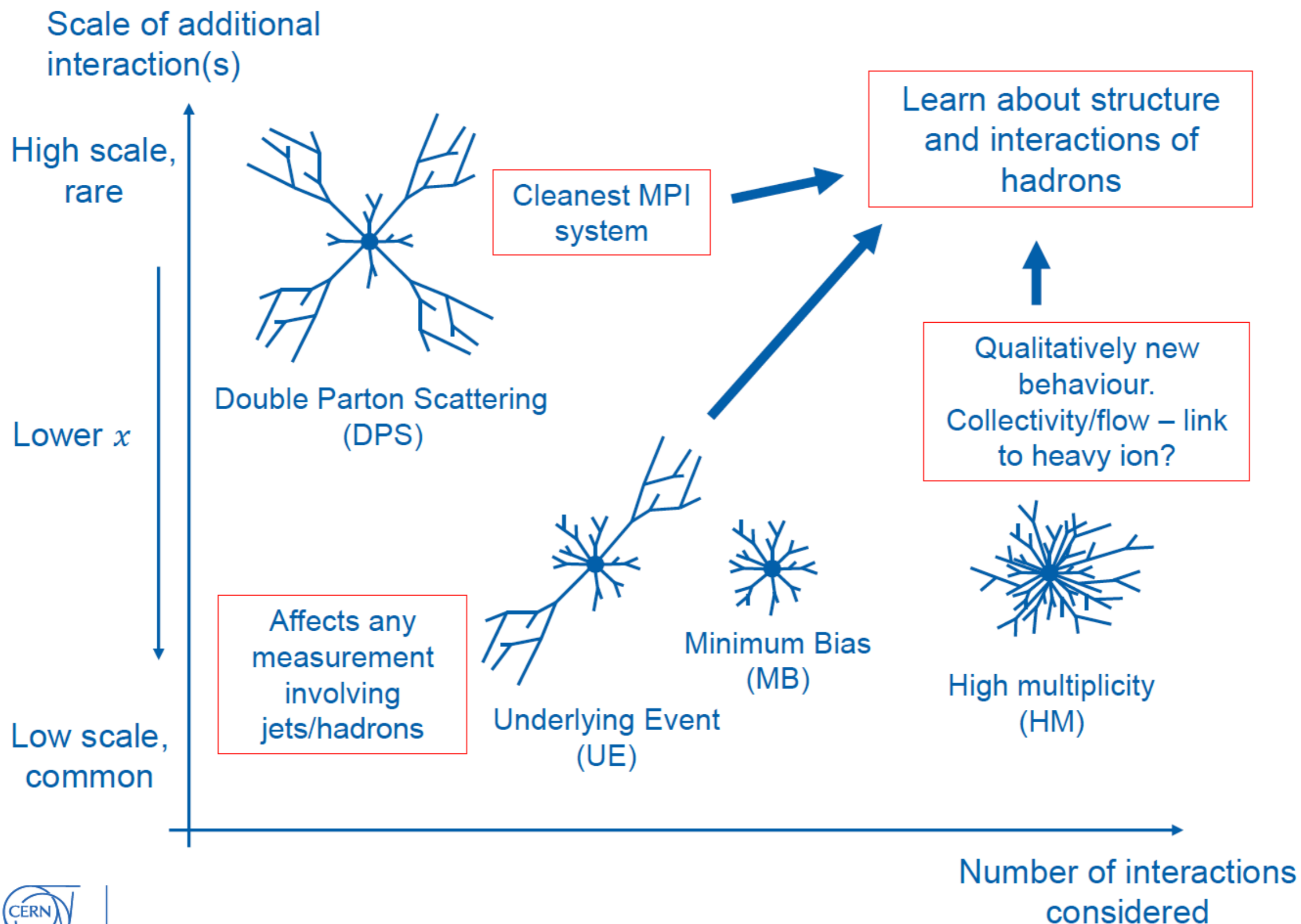


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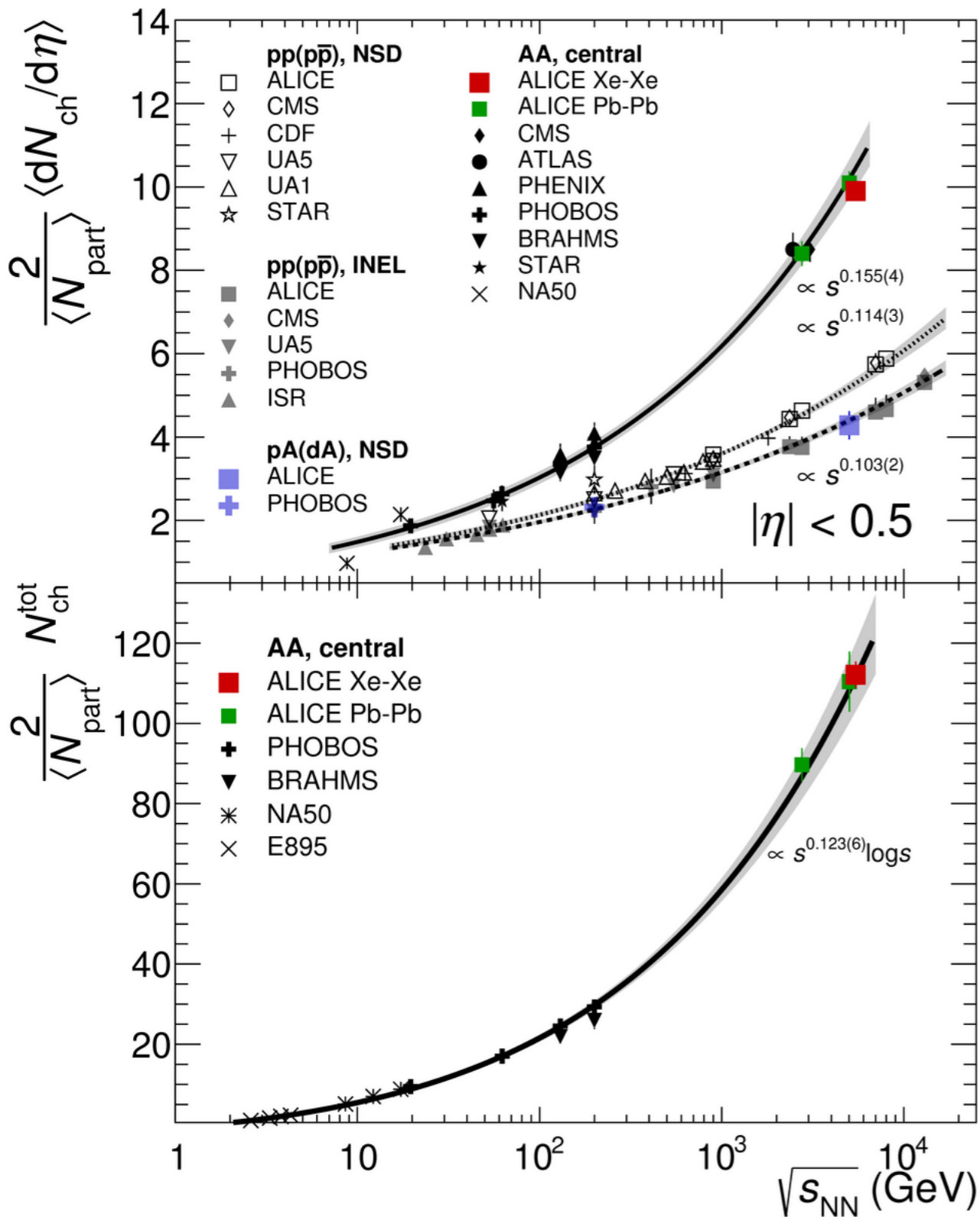
Multi parton interaction (MPI) landscape



Multi parton interaction (MPI) landscape



Charged particle multiplicity



ntracklets	$\langle dN_{ch}/d\eta \rangle (\eta < 1)$
1-9	3
10-29	10
30-59	25
60-99	35
int	~6

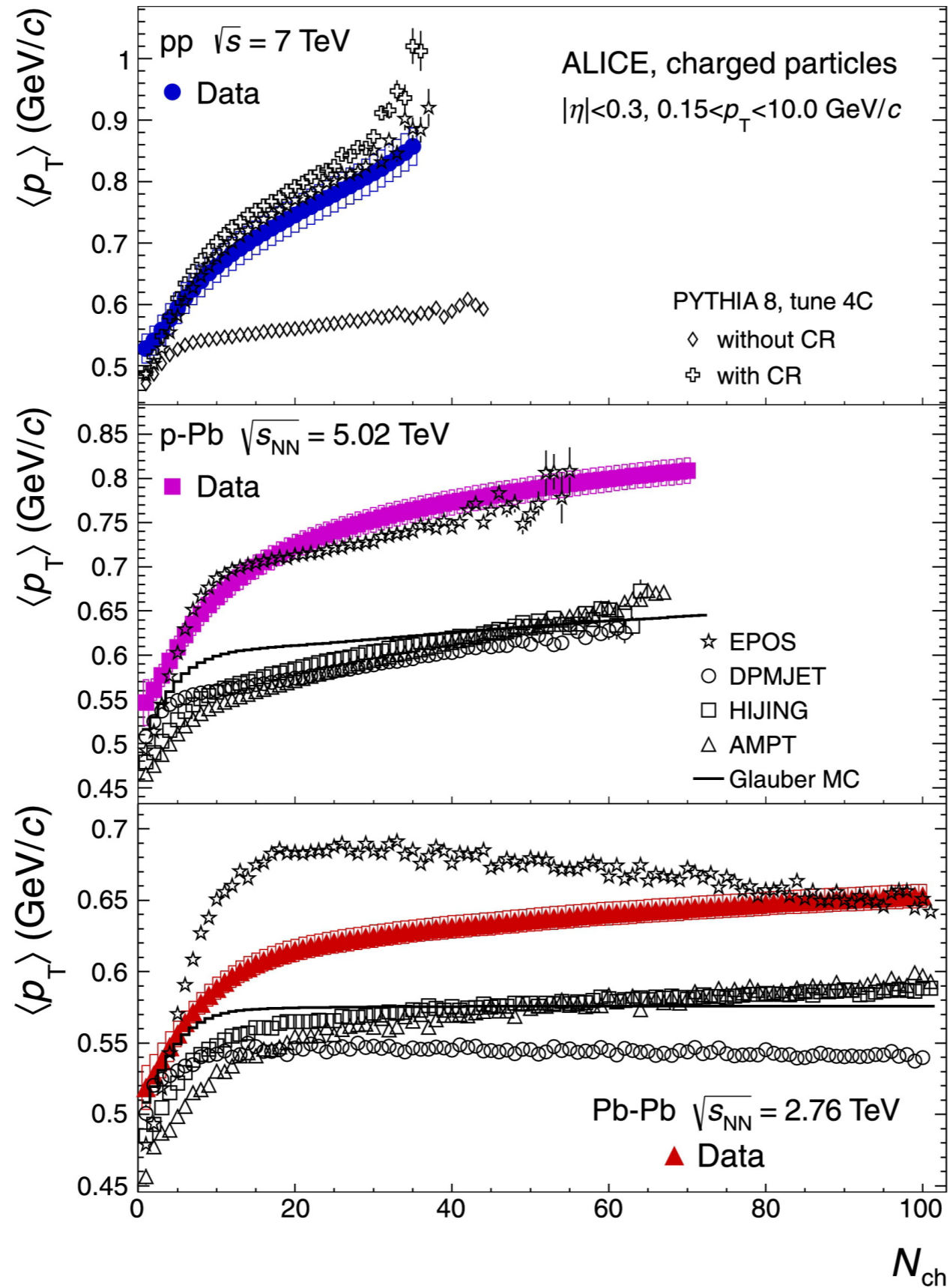
Pb-Pb , $\sqrt{s} = 5.02$ TeV, $\sigma_{NN} = 70$ mb, $\sigma_{PbPb} = 7700$ mb

Centrality	$\langle N_{part} \rangle$	$\langle N_{coll} \rangle$	$\langle b \rangle$ (fm)
0-10%	359	1625	3.33
30-50%	109	270	~10
70-100 %	11.1	10.7	0.15
0-100%	114	392	~10.5

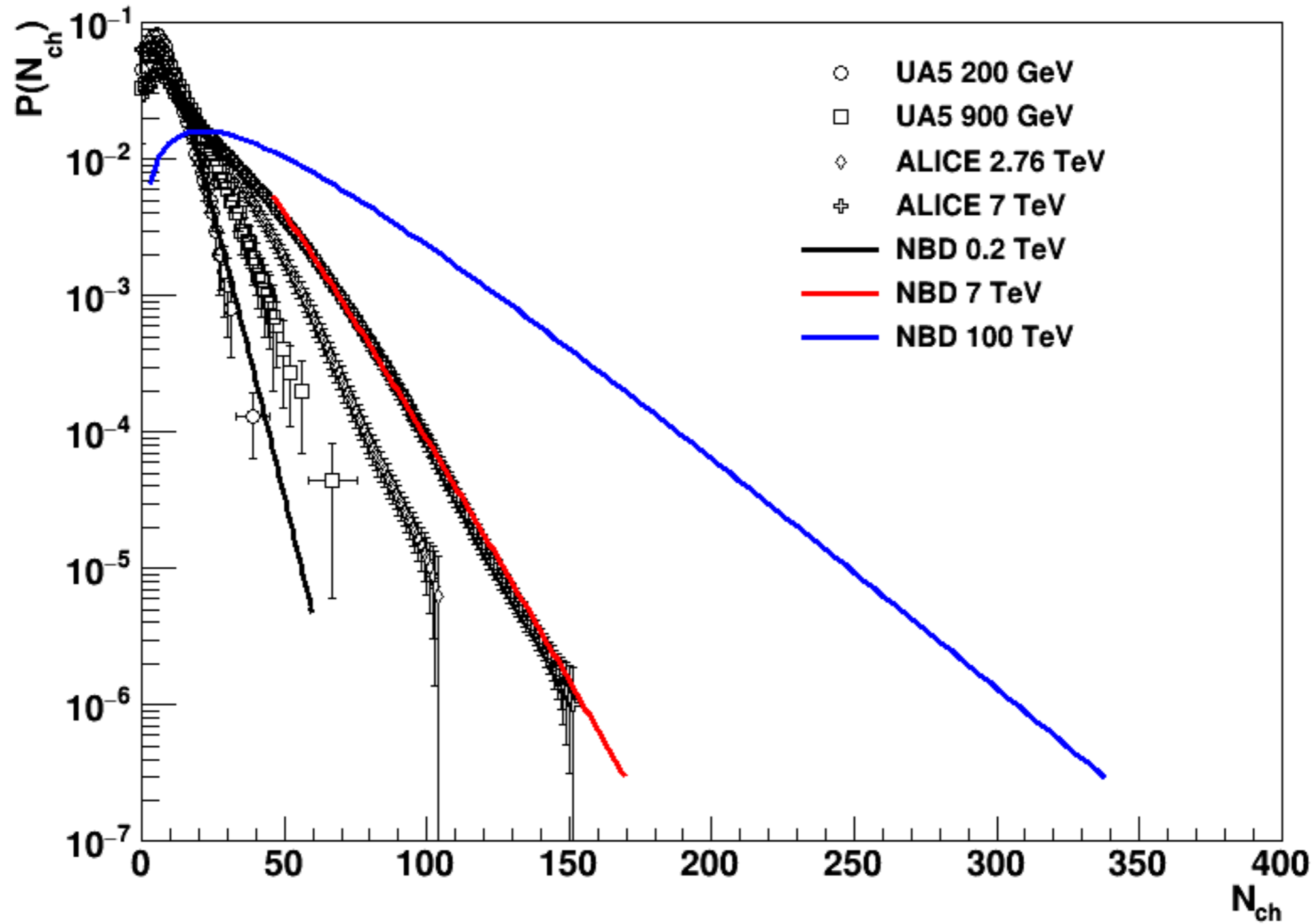
p-Pb , $\sqrt{s} = 5$ TeV, $\sigma_{NN} = 70$ mb, $\sigma_{PbPb} = 7700$ mb

Centrality	$\langle N_{part} \rangle$	$\langle N_{coll} \rangle$	$\langle b \rangle$ (fm)
0-100%	7.9	6.9	5.58

$\langle p_T \rangle$ vs multiplicity

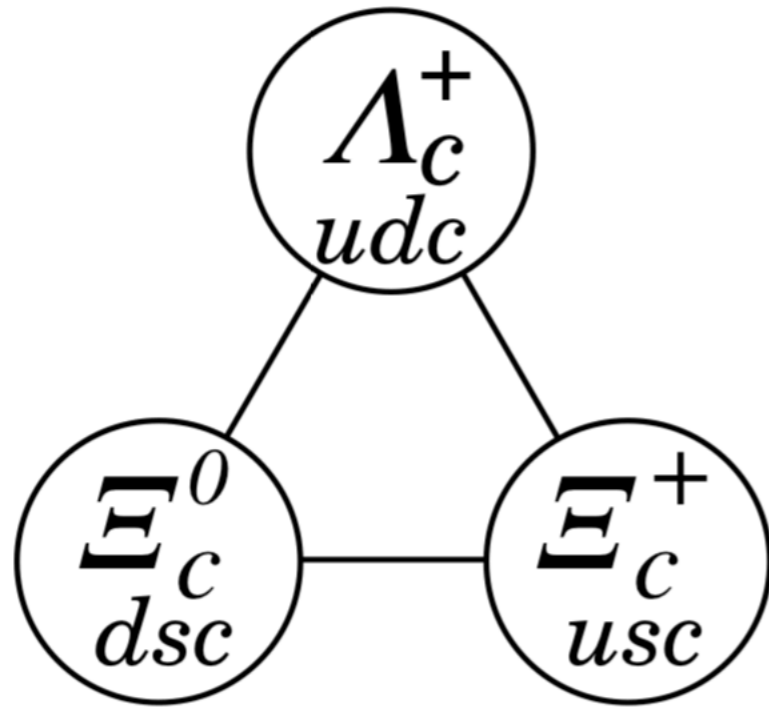


High multiplicity pp collisions at FCC

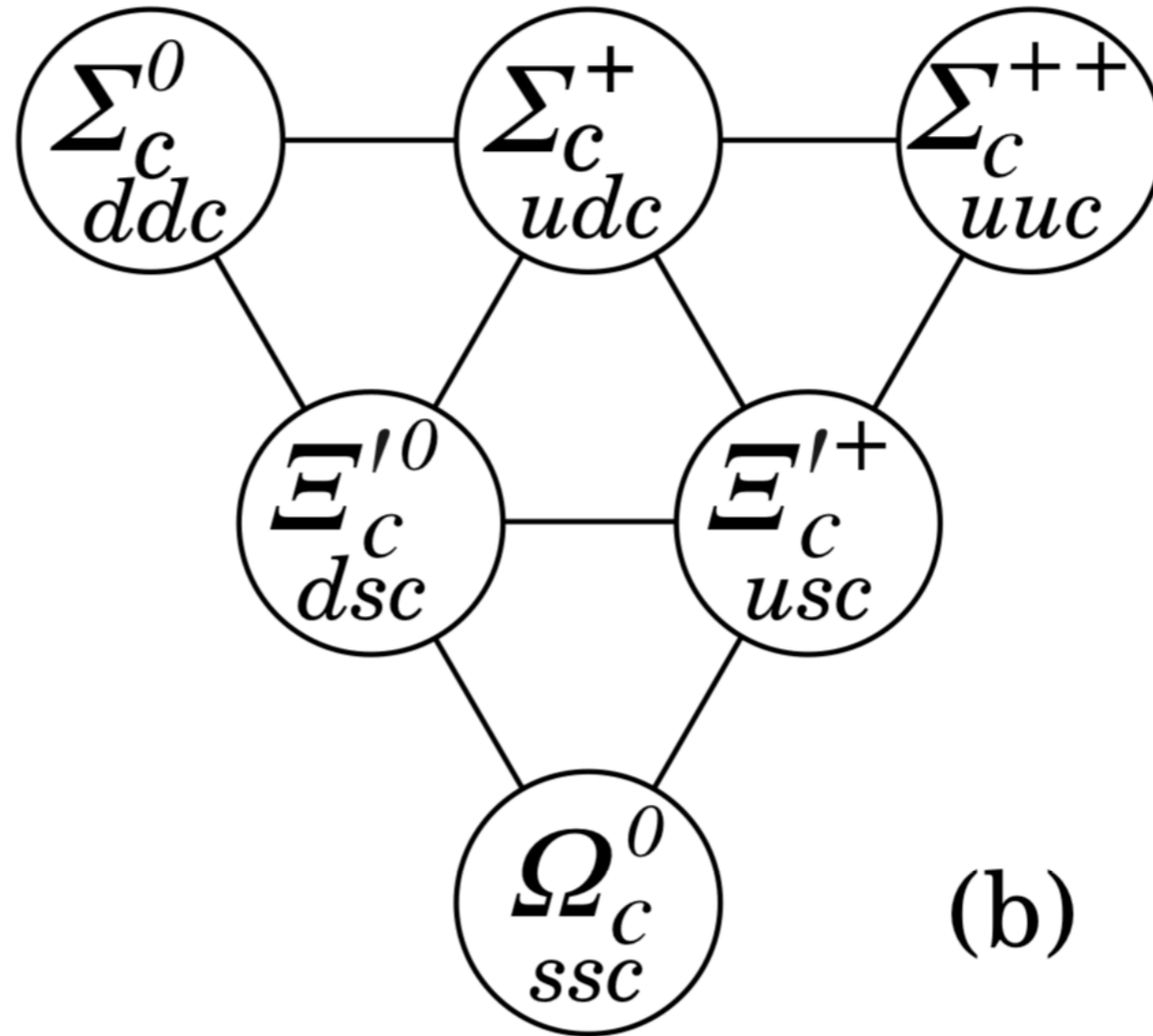


Credits to J. F. Grosse-Oetringhaus (CERN), Y.-J. Lee (MIT)

Charmed baryons



(a)



(b)