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Hadron Multiplicity and Fragmentation in SIDIS

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COMPASS final results on multiplicities of charged hadrons and of identified pions and kaons produced in the deep inelastic muon scattering off an isoscalar target are presented and compared to HERMES results. Measurements are done in bins of x, y and z in a wide kinematic range. The hadron and pion data show a good agreement with (N)LO QCD expectations. The most interesting is the kaon multiplicity that allows to extract kaon fragmentation functions, a crucial ingredient in solving the strange quark polarisation puzzle. The COMPASS results are quite different from the expectations of the old NLO DSS fit and they cannot be described by LO QCD either. In this context the importance of K^+/K^- multiplicity ratio at high z is discussed.

E-mail

nicolas.pierre@cern.ch

Primary author: Mr PIERRE, Nicolas (CEA Saclay)

Presenter: Mr PIERRE, Nicolas (CEA Saclay)

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