

J/psi production in proton-lead collisions at 8 TeV with the LHCb detector

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We present new results on J/psi production in p-Pb collisions, using the data collected in 2016 by LHCb at 8 TeV nucleon-nucleon center-of-mass energy. The LHCb experiment has the unique property to study heavy-ion interactions in the forward region (pseudorapidity between 2 and 5) with a fully instrumented detector. Both forward and backward rapidities are covered thanks to the possibility of beam reversal. Cold Nuclear Matter (CNM) effects are probed through measurements of nuclear modification factors and forward-backward production of both prompt and displaced J/psi. With respect to the results based on the 5 TeV sample collected in

2013, an increase in luminosity by a factor 20, other than the larger charm production cross-section, allow a remarkable improvement of the experimental accuracy. Results are compared with theoretical predictions modeling different CNM effects.

List of tracks

Small systems (pA)

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