

Contribution submission to the conference SMuK 2021

Studies on Midrapidity J/ψ Production as a Function of Charged-Particle Multiplicity with ALICE — ●AILEC DE LA

CARIDAD BELL HECHAVARRIA and TABEA EDER — Institut für Kernphysik, WWU. Wilhelm-Klemm-Straße 9, 48149 Münster

Previous ALICE studies have shown a stronger than linear relative increase of the inclusive J/ψ production at mid-rapidity as a function of the mid-rapidity charged-particle multiplicity in proton-proton collisions at the LHC. Studies on Monte Carlo simulations with PYTHIA 8 attributed this behavior to autocorrelation effects. In this regard, interesting results were obtained studying the correlation of the J/ψ production with the charged-particle multiplicity in different regions of the azimuthal angle with respect to the flight direction of the J/ψ meson.

With experimental data on pp collisions at $\sqrt{s}=13$ TeV and pPb collisions at $\sqrt{s}=5.02$ TeV, collected with ALICE during Run 2 of data taking at the LHC, current results of the relative J/ψ yield as a function of the charged-particle multiplicity, measured at mid-rapidity ($|y|<0.9$) in the di-electron decay channel, will be shown and compared to theoretical predictions from the PYTHIA8 Monte Carlo event generator.

Part: HK
Type: Vortrag;Talk
Topic: Hadronenstruktur und -spektroskopie
Email: acaridad@uni-muenster.de