Strangeness in Quark Matter 2019



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${\rm J}/\psi$ production measurements in pp, p-Pb and Pb-Pb collisions at mid-rapidity using the ALICE detector at LHC

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 J/ψ production provides a particular sensitivity to the medium, which can be produced in heavy-ion collisions at ultrarelativistic energies as delivered by the LHC. The vacuum production is modeled by a reference measured in proton-proton collisions and potential initial-state effects can be constrained using p-Pb collisions in the same collision-energy regime.

In this contribution J/ ψ production measured at mid-rapidity (|y|<0.9) with the ALICE detector down to zero transverse momentum is presented. Final results of the proton-proton collisions at $\sqrt{s}=5.02$ TeV collected in 2017 are presented which serve also as a high-precision reference for the nuclear modification factors in p-Pb and Pb-Pb collisions at the corresponding centre-of-mass collision energy. The status of the analysis of the nuclear modification factor and the separation of the prompt and non-prompt components of J/ ψ production in p-Pb collisions at $\sqrt{s_{\rm NN}}=8.16$ TeV is shown. Available models are confronted with the data.

Collaboration name

ALICE

Track

Heavy Flavour

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