

J/psi production in pp collisions at $\sqrt{s} = 5.02$ TeV measured at forward rapidity with ALICE at the LHC

The production of charmonium states (for instance J/ψ and $\psi(2S)$) is one of the probes studied to investigate the properties of the Quark-Gluon Plasma (QGP) formed in high-energy heavy-ion collisions. Indeed, the presence of a deconfined medium should modify the charmonium production yield, due to a competition of the color screening of the charm quark anti-quark potential and the recombination of charm and anti-charm quarks. In order to quantify those effects occurring in high energy heavy-ions collisions, a reference measurement of the J/ψ production in the absence of a hot medium is needed. This measurement is performed in pp collisions at the same colliding energy.\

In this poster, we will present the measurement of the J/ψ production cross section in pp collisions at $\sqrt{s} = 5.02$ TeV measured at forward rapidity with the ALICE detector. A detailed description of the analysis steps will be provided, some of them also being common to the analysis of the inclusive J/ψ nuclear modification factor R_{AA} in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV.

Preferred Track

Quarkonia

Collaboration

ALICE

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