

J/Psi production in proton-proton collisions at $\sqrt{s} = 2.76$ TeV in the ALICE Forward Muon Spectrometer

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on behalf of the ALICE collaboration

Abstract

The ALICE experiment at LHC has collected, in March 2011, proton-proton data at $\sqrt{s} = 2.76$ TeV. This energy in the center of mass allows to have a pp reference for the PbPb collisions that have been collected, at the end of 2010, at $\sqrt{s_{NN}} = 2.76$ TeV.

In this poster, we show the first analysis, performed on the pp data sample at $\sqrt{s} = 2.76$ TeV, concerning the detection of the J/ψ meson through its decay into $\mu^+\mu^-$ pairs at forward rapidity ($2.5 < y < 4$) in the ALICE Muon Spectrometer.

We focus on the different steps required to obtain the integrated and differential cross-section for inclusive J/ψ production, the latter one as a function of the J/ψ transverse momentum p_T and rapidity y .

First of all, details are provided concerning the criteria adopted to select runs and events used for the analysis. The different techniques used for the extraction of the signal are discussed as well as the method followed to determine the acceptance and efficiency corrections.

Finally, we show some preliminary plots providing also some details about the alignment of the tracking chambers of the Muon Spectrometer.

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Track Classification: Heavy flavor and quarkonia production