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Measurement of the J/ψ elliptic flow at forward rapidity in Pb-Pb collisions at $\sqrt{s_{NN}}$ = 2.76 TeV with the ALICE experiment

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Heavy quark resonances, produced in high energy heavy-ion collisions, are important observables for the study of Quantum Chromodynamics (QCD) interactions at extreme energy-densities. Lattice QCD calculations predict a phase transition of the nuclear matter to Quark Gluon Plasma (QGP). The suppression (due to color screening mechanism) or enhancement (due to regeneration mechanism) of charmonium resonances (J/ψ) have been proposed as a signature of QGP. ALICE has measured the J/ψ in the forward rapidity region via the dimuon ($\mu^+\mu^-$) decay channel in Pb-Pb collisions at $\sqrt{s_{NN}}$ = 2.76 TeV, the result shows less suppression with respect to that measured at lower energies of SPS and RHIC. The elliptic flow measurement of J/ψ provides an important observation to test the degree of thermalization of J/ψ in heavy-ion collisions.

In this talk, the elliptic flow of J/ψ measured in the forward rapidity (-4.0<y<-2.5) of ALICE via $\mu^+\mu^-$ decay channel will be discussed for Pb-Pb collisions at $\sqrt{s_{NN}}$ = 2.76 TeV. The recent analysis of the p_T integrated flow for different centrality bin will be presented. We will also discuss differential flow as function of transverse momentum. The results will be compared with the previous measurements at RHIC and theoretical calculations.

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