Contribution ID: **458** Type: **Poster**

B → J/ψ measurement in PbPb at √s_NN = 2.76 TeV using CMS

Measuring open heavy flavor at $\sqrt{(}s_{NN}) = 2.76$˜TeV will test the theoretical calculations on the J/ψ suppression at RHIC compared to LHC. With the CMS high resolution tracking, we are able to separate prompt J/ψ from non-prompt J/ψ in heavy ion collisions, thus disentangling yield modifications on primary J\$\psi\$ from those coming from Bs that decay outside the medium. The long life-time of the b-hadron determines his decay products to be produced further away from the primary vertex. This makes possible the separation of the prompt from the non-prompt J/ψ based on their distance to the primary vertex. To determine the fraction of non-prompt J/ψ from b-hadron decays in data, we performed a 2D unbinned maximum-likelihood fit in mass and pseudo-proper decay length, binned in transverse momentum, rapidity and centrality bins. This poster presents the first measurement of the prompt and non-prompt J/ψ production in the di-muon decay channel as a function of transverse momentum, rapidity and centrality in PbPb collisions at $\sqrt{s_{NN}} = 2.76$˜TeV.

Primary author: CMS, Collaboration (UCLouvain)

Presenter: CMS, Collaboration (UCLouvain)

Track Classification: Heavy flavor and quarkonia production