



Contribution ID: 143

Type: **not specified**

Global description of bottomonium suppression in proton-nucleus and nucleus-nucleus collisions at LHC energies

Wednesday 18 April 2018 16:50 (20 minutes)

Thanks to an improved comover interaction model, we show that we can reach a global and coherent description of bottomonium suppression in both proton-nucleus and nucleus-nucleus collisions as measured by the CMS and ATLAS collaboration at the LHC. The measured relative suppression of the excited bottomonium states as compared to their ground state in proton-nucleus collisions allows us to constrain the scattering cross sections between the bottomonia and comovers also created during the collisions. Our result hints at a similar momentum distribution of these comovers in the environment created by proton-nucleus and nucleus-nucleus collisions. Along the way of our study, we also update our knowledge for the bottomonium feed-down pattern in the kinematical region relevant for such studies. Besides, we improve our knowledge on the modification of the nuclear parton distribution functions in proton-nucleus collisions.

Primary authors: GONZALEZ FERREIRO, Elena (Universidade de Santiago de Compostela (ES)); LANSBERG, Jean-Philippe (IPN Orsay, Paris Sud U. / IN2P3-CNRS)

Presenter: GONZALEZ FERREIRO, Elena (Universidade de Santiago de Compostela (ES))

Session Classification: WG5: Physics with Heavy Flavours

Track Classification: WG5: Physics with Heavy Flavours