Quark Matter 2018



Contribution ID: 192

Type: Poster

## J/psi production as a function of charged particle multiplicity in pp collisions at $\sqrt{s} = 13$ TeV at forward rapidity with ALICE

Tuesday 15 May 2018 19:10 (30 minutes)

In high-energy pp collisions, there can be a substantial contribution from Multi-Parton Interactions (MPI) in particle production mechanisms. In this case, several interactions at the partonic level occur in a single pp collision and this implies a correlation between the particle production and the total event multiplicity. At the LHC energies, MPI might occur at hard momentum scales, thus affecting the heavy quark production. Such an effect can be investigated by studying the correlations between heavy-flavour production and the total charged-particle multiplicity. In this poster, we will present the preliminary results of  $J/\psi$  production as a function of charged-particle multiplicity in pp collisions at  $\sqrt{s} = 13$  TeV at forward rapidity (2.5<y<4) using the data collected by the ALICE detector.  $J/\psi$  are reconstructed via  $J/\psi \rightarrow \mu^+ + \mu^-$  decay channel using the Forward Muon Spectrometer, while the charged-particle multiplicity is obtained from the Silicon Pixel Detector. Results will be compared with the perturbative Quantum Chromodynamics (pQCD) inspired models.

## **Content type**

Experiment

## Collaboration

ALICE

## Centralised submission by Collaboration

Presenter name already specified

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Track Classification: Quarkonia