Contribution ID: **265** Type: **Poster**

Energy dependence of transverse momentum spectra of primary charged particles in proton proton collisions measured by ALICE at the LHC

Tuesday 15 May 2018 19:10 (30 minutes)

Particle production at high energies is often described as a result of the interplay of perturbative (hard) and non-perturbative (soft) QCD processes. Therefore, the measurements of transverse momentum spectra in pp collisions are important to provide a baseline for perturbative QCD and constraints for a better tuning of models and event generators. In addition, they constitute a valuable reference to study nuclear effects in nucleus-nucleus and proton-nucleus collisions, in particular allowing one to measure the nuclear modification factors.

The ALICE experiment has collected data of proton-proton collisions at 2.76 TeV, 5.02 TeV, 7 TeV and the top LHC energy of 13 TeV. The 5.02 TeV and 2.76 TeV datasets, in particular, are crucial for the comparison with the measurements in Pb-Pb (5.02TeV and 2.76TeV) and p-Pb (5.02TeV) collisions taken at the same energy. We present the measurements of charged particle transverse momentum spectra in pp collisions at all these energies and the energy evolution as well as comparisons to the expectations from Monte Carlo event generators commonly used at the LHC.

Content type

Experiment

Collaboration

ALICE

Centralised submission by Collaboration

Presenter name already specified

Author: PEREZ LEZAMA, Edgar (Johann-Wolfgang-Goethe Univ. (DE))

Presenter: PEREZ LEZAMA, Edgar (Johann-Wolfgang-Goethe Univ. (DE))

Session Classification: Poster Session

Track Classification: Jet modifications and high-pT hadrons