Contribution ID : **7** Type : **Oral talk**

Multiparticle correlations in pp-collisions at $\sqrt{s}$ = 13 TeV

Friday, 30 October 2026 12:05 (15)

We present the results of the analysis of multiparticle correlations with the factorial moment method. This method consists in plotting the dependence of normalized factorial moments of multiplicity distribution in the intervals of a dynamical variable on the size of these intervals and enables one to exclude statistical effects related to the finite particle multiplicity in events.

Monte-Carlo generated events with the Drell-Yan dimuon + jets production process in proton-proton collisions at the center-of-mass energy of 13 TeV are used in this work. We present the calculated numerical values of normalized factorial moments of multiplicity distribution in a selected pseudorapidity interval and demonstrate the dependencies of these values on the parameters of theoretical calculations. Each dependence is normalized to an integrated luminosity of 41.55 fb^{-1}, which corresponds to the 2017 data taking year at the LHC.

Primary author(s) : CHINARYAN, Artashes (JINR & MSU)

Co-author(s) : KODOLOVA, Olga (JINR)

Presenter(s) : CHINARYAN, Artashes (JINR & MSU)

Session Classification : High energy physics: experiment

Track Classification : High energy physics: experiment