

Recent soft QCD results from ATLAS

Wednesday 27 August 2014 12:10 (20 minutes)

Summary

Particle distributions sensitive to the underlying event in proton-proton collisions have been measured with the ATLAS detector at the LHC at 7 TeV centre-of-mass energy and compared to theoretical models. Evolution of the event shape variables, such as the transverse thrust, thrust minor and transverse sphericity have been studied for minimum bias events as a function of momentum scale. The ATLAS collaboration has also performed a measurement of Bose-Einstein correlations of the pairs of charged particles at 900 GeV and 7 TeV pp collisions. Bose-Einstein correlation parameters are investigated up to very high charged-particle multiplicities. In addition, the measurements with the ALFA detector of the elastic, inelastic and total p-p cross sections $\sqrt{s}=7$ TeV are presented and compared to theoretical models.

Primary author: ATLAS

Presenter: ZENIN, Oleg (Protvino, Russia)

Session Classification: Soft physics

Track Classification: MP