

ATLAS studies of Soft QCD Processes at 7 TeV

Thursday, 21 July 2011 15:45 (15 minutes)

Using Minimum Bias data recorded in 2010, ATLAS has carried out several studies of the global properties of pp collisions at 7 TeV. A precise measurement of the total inelastic cross-section is presented in a well-defined fiducial volume, taking advantage of the precise knowledge of the luminosity available from van der Meer scans. First detailed studies of diffraction cross-sections are also reported, based on pseudo-rapidity gap distributions. The fraction of the inelastic cross-section arising from diffractive processes is studied, and the differential cross-section is measured as a function of gap size.

Primary author: Dr BARONCELLI, Toni (INFN Roma Tre)

Presenter: DEEPAK KAR, Dresden

Session Classification: QCD

Track Classification: QCD