The Muon Charge Asymmetry Measurement in Inclusive pp→W+X production at √s=7 TeV

HASAN OGUL, The University of Iowa, CMS COLLABORATION — Measurements of the muon charge asymmetry in inclusive pp→W+X production at √s=7 TeV are presented. The data sample corresponds to an integrated luminosity of 4.7 fb−1 recorded by the CMS detector at the LHC. With a sample of more than 20 million W → μν events, the statistical precision is greatly improved in comparison to previous measurements. These new results provide additional constraints on the parton distribution functions of the proton in the Bjorken parameter x range from 0.001 to 0.1.