Contribution ID: **684** Type: **talk**

Measurements of W charge asymmetry

Thursday 23 July 2015 09:25 (18 minutes)

We present W boson and lepton charge asymmetry measurements from W decays in the electron channel, with 9.7 fb^{-1} of RunII data collected by the D0 detector at the Fermilab Tevatron Collider. The electron charge asymmetry is presented as a function of the electron transverse momentum and pseudo-rapidity out to $|\eta| \leq 3.2$; we also give the W charge asymmetry as a function of W boson rapidity. The asymmetries are compared with next-to-leading order perturbative quantum chromodynamics calculations. These charge asymmetry measurements will allow more accurate determinations of the proton parton distribution functions.

Authors: DZERO.PHYSICS.COORDINATOR, Bob.Hirosky (DZero Experiment, Fermilab); DZERO.PHYSICS.COORDINATOR, Boris.Tuchming (DZero Experiment, Fermilab)

Presenter: HOLZBAUER, Jenny Lyn (Mississippi University (US))

Session Classification: Top and Electroweak Physics

Track Classification: Top and Electroweak Physics