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Electroweak Physics at the Tevatron and LHC

JOHN FREEMAN, Fermilab

Collider measurements of electroweak phenomena serve numerous purposes: electroweak quantities can be used to test the standard model via global fits, serve to provide information about other areas such as Higgs physics and QCD, and help calibrate detectors through the measurement of precisely known electroweak values. At the Tevatron, years of data analysis by the CDF and D0 experiments have yielded numerous important electroweak measurements whose techniques and impact will be discussed. These include the world's best W mass measurements, information on PDFs via measurements of Z rapidity and forward-backward charge asymmetry of the W decay, limits on anomalous triple gauge coupling quantities, and discoveries of diboson production in various decay channels. At the LHC, a crucial purpose of electroweak measurements, particularly during its early running, will be as a tool to better understand the energy scales and efficiencies of the LHC detectors. In the long term, while some electroweak measurements at the LHC are expected to improve on those at the Tevatron simply due to higher statistics, others will only be able to improve on the Tevatron measurements by a thorough understanding of the detector's systematics. Systematically limited electroweak measurements at the LHC will benefit from calibration measurements in this regard, and their prospects will be discussed.