Abstract ID : 745

Inclusive-jet cross sections in photoproduction at HERA and a comparison of the kt, anti-kt and SIScone jet algorithms

Content :

Differential inclusive-jet cross sections have been measured in photoproduction using the anti-kt and SIScone algorithms. The measurements were made for boson virtualities $Q^2 < 1$ GeV^2 with the ZEUS detector at HERA using an integrated luminosity of 82 pb^{-1} and the jets were identified in the laboratory frame. The performance and suitability of the jet algorithms for their use in hadron-like reactions were investigated by comparing the measurements to those performed with the kt algorithm. Next-to-leading-order QCD calculations were compared to the measurements. Measurements of the ratios of cross sections using different jet algorithms are also presented. Values of alphas(Mz) were extracted from the data.

Primary authors : Dr. HAAS, Tobias (DESY)

Co-authors : Dr. GEISER, Achim (DESY) ; Prof. TASSI, Enrico (Universita della Calabria) ; Dr. REISERT, Burkard (Max-Planck Institut für Physik München)

Presenter : Dr. HAAS, Tobias (DESY)

Track classification : 03 - Perturbative QCD, Jets and Diffractive Physics ; 04 - Hadronic Structure, Parton Distributions, soft QCD, Spectroscopy

Contribution type : Parallel Session Talk

Submitted by : Mr. HAAS, Tobias

Submitted on Friday 14 May 2010

Last modified on : Friday 14 May 2010

Comments :

These results will be presented on behalf of the ZEUS Collaboration