Abstract ID: 747

Subjet distributions in deep inelastic scattering at HERA

Content:

Subjet distributions were measured in neutral current deep inelastic ep scattering with the ZEUS detector at HERA using an integrated luminosity of 81.7 pb-1. Jets were identified using the kT cluster algorithm in the laboratory frame. Subjets were defined as jet-like substructures identified by a reapplication of the cluster algorithm at a smaller value of the resolution parameter ycut. Measurements of subjet distributions for jets with exactly two subjets for ycut=0.05 are presented as functions of observables sensitive to the pattern of parton radiation and to the colour coherence between the initial and final states. Perturbative QCD predictions give an adequate description of the data.

Primary authors: Dr. HAAS, Tobias (DESY)

Co-authors: Dr. REISERT, Burkard (Max-Planck Institut für Physik München); Dr. GEISER, Achim

(DESY); Prof. TASSI, Enrico (Universita della Calabria)

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

Thursday 20 May 2010 Page 6