XX International Workshop on Deep-Inelastic Scattering and Related Subjects



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Cross Section for High- p_T **Hadron Production in Muon-Deuteron Scattering at** $\sqrt{s} = 17.4$ **\,GeV**

Thursday 29 March 2012 12:00 (20 minutes)

Lepton-nucleon scattering experiments are performed to investigate the (spin-)structure of nucleons. The theoretical framework for the interpretation of such measurements is perturbative QCD (pQCD). In this contribution we present the measurement of the cross section for the quasi-real photoproduction of charged hadrons with high transverse momenta in muon-deuteron scattering at COMPASS ($\sqrt{s} = 17.4$),GeV). Furthermore, the dependence of the cross

section on pseudo-rapidity and the hadron charge is discussed. The results are compared to recent next-toleading (NLO) pQCD calculations to evaluate the applicability of pQCD to this process at COMPASS energies.

Author:HOEPPNER, Christian (Technische Universitaet Muenchen (DE))Presenter:HOEPPNER, Christian (Technische Universitaet Muenchen (DE))Session Classification:Spin physics

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