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Measurement of beauty production from dimuon events at HERA

Content :
Beauty production in events containing two muon in the final state has been measured with the ZEUS detector at HERA using an integrated luminosity of 114 pb-1. A low transverse-momentum threshold for muon identification, in combination with the large rapidity coverage of the ZEUS muon system, gives access to a very large fraction of the phase space for beauty production. The total cross section for beauty production in ep collisions at sqrt(s)=318 GeV has been measured to be sigma_tot(ep->b bar X)=13.9+-1.5(stat.)+4.0-4.3(syst.) nb. Differential cross sections and a measurement of bbar correlations are also obtained, and compared to other beauty cross-section measurements, Monte Carlo models and next-to-leading-order QCD predictions.

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Comments :

These results are presented on behalf of the ZEUS Collaboration