Abstract 243
Parallel sessions: 2,3,4,5
Plenary sessions: 1,2,3,6

Photo-production of $\psi(2S)$ Mesons at HERA

H1 Collaboration

Measurements of the cross-section for the quasi-elastic photo-production of $\psi(2S)$ mesons have been made at an average photon-proton centre-of-mass energy of 80 GeV. The data were collected by the H1 experiment at the HERA collider in 1994 and 1995, and correspond to a total integrated luminosity of about 8.2 pb^{-1}. Identification of the mesons proceeds using the decays of $\psi(2S)$ to $J/\psi\pi^+\pi^-$, where the J/ψ subsequently decays to a lepton pair. The ratio of the cross-sections for $\psi(2S)$ and J/ψ has been determined for quasi-elastic production.