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# Measurement of dijet photoproduction for events with a leading neutron at HERA

## Content :

Differential cross sections for dijet photoproduction in association with a leading neutron,  $e^+ + p \rightarrow e^+ + \text{jet} + \text{jet} + X (+n)$ , have been measured with the ZEUS detector at HERA using an integrated luminosity of 40 pb<sup>-1</sup>. The fraction of dijet events with a leading neutron was studied as a function of different jet and event variables. Single- and double-differential cross sections are presented as a function of the longitudinal fraction of the proton momentum carried by the leading neutron,  $x_L$ , and of its transverse momentum squared,  $p_T^2$ . The dijet data are compared to inclusive DIS and photoproduction results; they are all consistent with a simple pion exchange model. The neutron yield as a function of  $x_L$  was found to depend only on the fraction of the proton beam energy going into the forward region, independent of the hard process. No firm conclusion can be drawn on the presence of rescattering effects.

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## Comments :

These results will be presented on behalf of the ZEUS collaboration