Search for events with an isolated high energy lepton and missing transverse momentum at HERA

H1 Collaboration
DESY, Hamburg, Germany

A search is performed for events with an imbalance in transverse momentum and with an isolated high energy lepton in e^-p scattering at HERA. The results are compared to those obtained from the e^+p HERA run where one e^- event and and five $\mu^\pm$ events were found together with evidence for unseen particles carrying tranverse momentum. Three of the six events were found in a region of phase space likely to be populated by the production of W bosons with subsequent leptonic decay. The remaining three events showed kinematic properties which are atypical of all Standard Model processes considered.

References

1. H1 Collaboration, C. Adloff *et al*, DESY-98-063 / Eur. Phys. J. C 5 (1998) 4, 575-584