Measurement of the W production cross section at HERA

H1 Collaboration
DESY, Hamburg, Germany

Using for the first time the e^-p data collected in 1998 and 1999 in addition to all available e^+p data of the H1 experiment the production of W bosons at HERA is investigated. The analysis covers all W decay channels and allows for unexpected W production mechanisms. The cross sections for e^+ and e^- beams are contrasted with predictions of the Standard Model.