Measurement of Open Beauty Production at HERA

H1 Collaboration
DESY, Hamburg, Germany

Several methods for extracting b-quark enriched event samples from the data collected by the H1 detector at HERA are presented, utilising the semi-muonic b-quark decays. The $b\bar{b}$ cross section is measured at photon-proton centre-of-mass energies around $\sqrt{s_{\gamma p}} =$ 200 GeV. The result is found to be significantly above the cross section expected from QCD calculations.