

Combined Electroweak and QCD Fit of Inclusive Neutral and Charged Current Data with Polarized Lepton Beams at HERA

vendredi 22 juillet 2011 15:20 (30 minutes)

Using the deep inelastic e+p and e-p neutral and charged current scattering cross sections, including data with polarised electron beams, a combined electroweak and QCD analysis is performed to determine vector and axial-vector couplings v_q and a_q of light quarks u and d to the Z^0 boson accounting for their correlation with parton distributions. The precision has been improved in particular for vector couplings with respect to the published results based on the unpolarized HERA data only. The determinations from HERA are compared with those from LEP and Tevatron.

Auteur principal: KRUEGER, Katja (KIP, Heidelberg University, H1 Collaboration)

Orateur: RIZVI, Eram

Classification de Session: Top and Electroweak Physics

Classification de thématique: Top and Electroweak Physics