Service de Physique Nucléaire



Séminaire

le vendredi 17 septembre 2010 à 11h

CEA Saclay, Orme des Merisiers, Bât. 703, Salle 135

Polarized parton densities from analysis of inclusive and semi-inclusive lepton scattering data

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A new next-to-leading order QCD analysis of the world inclusive and semi inclusive lepton scattering data is performed. In contrast to other similar analyses, the $1/Q^2$ terms (kinematic - target mass corrections, and dynamic - higher twist corrections to the spin structure function) are taken into account. The recent semi-inclusive COMPASS data on a proton target are included in the analysis. The impact of the semi-inclusive data on the resulting polarized parton densities (PDFs) and on the higher twist corrections is discussed. The final PDFs are compared to those obtained from QCD fits to the inclusive data alone, as well as to results from previous global analysis.