Contribution ID: **705**   Type: **not specified**

Double logarithmic term Lnˆ2(1/x) in the polarized non singlet structure function at small x in valon model

We study the low x behavior of non-singlet spin structure Function, of the nucleon in the so-called the valon representation. We find the double logarithmic term Lnˆ2(1/x) in the polarized non singlet structure function at small x with using the valon model .The Structure of the valon itself develops through the perturbative dressing of a valence quark in QCD, which is independent of the hosting hadron. The results of non-singlet spin structure Function is in excellent agreement with the experimental data from HERMES collaborations for the entire measured range of x. It also provides an acceptable agreement with the older data from SMC, E143 and E155 experiments. We have further compared our results with those from AA, BB, GRSV, and DNS global fits.

Authors: Dr TAGHAVI SHAHRI, Fatemeh (IPM); Prof. ARASH, Firooz (Tafresh University)

Presenter: Dr TAGHAVI SHAHRI, Fatemeh (IPM)

Track Classification: Poster session