

Unpolarized parton distributions and structure functions of the nucleon are analyzed in the valon model. The valon representation provides a model to represent hadrons in terms of quarks, providing a unified description of bound state and scattering properties of hadrons. The valon distribution in a proton and the parton distributions inside the valon are necessary to obtain the parton distributions in a proton.

It is shown that the results of the calculations for the proton structure function are in good agreement with the experimental data for a range of values of Q^2 .