

XVth Quark Confinement and the Hadron Spectrum



Contribution ID: 205

Type: Oral

Single spin asymmetry among hyperons using scalar diquark model

Thursday 22 August 2024 16:50 (20 minutes)

The Fourier transformed chiral even generalized parton distributions ($GPDs$) for purely transverse momentum transfer ($\Delta^+ = 0$) characterize an individual parton distribution of a hyperon in a perpendicular plane at some distance from the center of momentum of the system. Further, the presence of left-right asymmetry in the distorted parton distribution gives a clue for the presence of single-spin asymmetry. In order to have a deep insight into the distortions, we have exhibited the information about asymmetries from the spin flip matrix element of a GPD for hyperons by employing scalar diquark model and also compared parton distributions of different possible combinations of quark-diquark pair to get substantial structural information on hyperons.

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Session Classification: Light Quarks

Track Classification: B: Light Quarks