



Contribution ID: 14

Type: **not specified**

## Leading twist GPDs and spin densities in a proton

We evaluate both chirally even and odd generalized parton distributions (GPDs) in the leading twist in a recently proposed quark-diquark model for the proton where the light-front wavefunctions are constructed from the soft-wall AdS/QCD prediction. The GPDs in transverse impact parameter space give the spin densities for different quark and proton polarizations. For longitudinally polarized proton only chiral even GPDs contribute but for transversely polarized proton both chiral even and chiral odd GPDs contribute to the spin densities. We present a detail study of the spin densities in this model.

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