

## On $\rho$ meson generalized parton distributions

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We study  $\rho$  meson unpolarized and polarized generalized parton distribution functions (GPDs) based on a light-front constituent quark model[1,2]. The electromagnetic form factors as well as other low-energy observables of the  $\rho$  meson are calculated and our results are compared to other calculations and possible experimental data. In our calculation, the contributions both from the valence and non-valence regimes are analyzed in detail. Moreover, we also give the structure functions in the forward limit. Our numerical results show that the present phenomenological model is reasonable to describe the general properties of the  $\rho$  meson.

### References

- [1] Bao-Dong Sun and Yubing Dong, Phys. Rev. D96, 036019 (2017).
- [2] Bao-Dong Sun and Yubing Dong, Phys. Rev. D99, 016023 (2019).

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