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The generalized parton distributions with the higher twist order

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The generalized parton distributions(GPDs) is constructed in the high limit of the virtuality. The leading twist is only considered to make the process factorizable. In this presentation the higher twist order, cat's ears contribution, is included to confirm the correction in the low virtuality. To solve the integration with complicated singularities and to avoid the regularization problem, we use the 1+1 light-front dynamics. We obtain the scattering amplitude satisfying the Ward identity and the real/imaginary part of the Compton form factor. With assuming the deeply virtual scattering, the full calculation is reduced to like the generalized parton distributions and we compare the full calculation with GPDs reduction to show the contribution of higher twist order in the virtuality of the current experiment.

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