Contribution ID: **42** Type: **Talk**

Photon-photon transition form factor for tensor meson quarkonium

Friday 13 September 2024 13:50 (20 minutes)

We will discuss the light-front formulation of quarkonium γ*γ transition
form factors for J PC = 2++ meson states. We will present γ*γ → χc2 transition amplitudes and the pertinent helicity form factors. We show the results for the two-photon decay width of χc2 and three independent transition form factors of χc2 as a function of photon virtuality Q2. We compare our results for the two-photon decay width to the recently measured ones by the Belle-2 and BES III collaborations. Our approach explains the value of Γ(χc2)/Γ(χc0) measured experimentally. We also present the off-shell widths as a function of photon virtuality and compare them to the Belle data.
Based on: I.B., et al., JHEP 06 (2024) 159, e-Print: 2402.13910 [hep-ph]

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