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Dynamical spin effects in the pion light-front wavefunction

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In this talk, I show how augmenting the pion light-front wavefunction with a dynamical spin component leads to a significant improvement in predicting observables like the mean charge radius, the decay constant, the space-like electromagnetic form factor, the twist-2 pion distribution amplitude and the photon-to-pion transition form factor. Holographic light-front wavefunction for a pseudoscalar meson is used for producing the results. The proposed dynamical spin wavefunction is then extended to other members of the lightest pseudoscalar nonet and the consequences are discussed.

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