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## Generalized parton distributions of the proton from a light-front QCD Hamiltonian

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We solve the nucleon's wave functions as eigenstates of the light-front quantum chromodynamics (QCD) Hamiltonian for the first time, using a fully relativistic and nonperturbative approach based on light-front quantization, without an explicit confining potential. These eigenstates are determined for the three-quark, three-quark-gluon, and three-quark-quark-antiquark Fock sectors, making them suitable for low-resolution probes. From this, we calculate generalized parton distributions (GPDs) at nonzero skewness in both the DGLAP and ERBL regions. Our results show qualitative agreement with other theoretical approaches. We further convolute our GPDs with the tree-level hard function, demonstrating the feasibility of calculating Compton form factors within tree-level factorization.

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