

Abstract Submitted
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Reduced helicity amplitudes for deuteron photodisintegration¹

JOHN HILLER, SOPHIA CHABYSHEVA, University of Minnesota-Duluth — We apply the reduced nuclear amplitude analysis to the helicity amplitudes of deuteron photodisintegration. This combines covariant, point-like amplitudes for the nucleons with the electric and magnetic form factors of the nucleons. The point-like amplitudes are modeled on the QCD one-gluon exchange amplitudes for $\gamma M \rightarrow q\bar{q}$, where M is a $q\bar{q}$ meson. The form factors take into account the internal structure of the nucleons. We compare the resulting cross section and polarization observables to recent data.

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