

## Two-body currents in one-particle one-hole lepton-nucleus interactions within a relativistic mean field model

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The hadronic responses and inclusive cross sections for lepton-nucleus scattering are computed within an independent-particle relativistic mean field model to describe the initial and final states, and one- and two-body current operators leading to the one-nucleon knockout reaction. The two-body currents produce an increase in the transverse sector that improves the agreement with data, meanwhile the effect in the longitudinal part is hardly visible. The distortion of the outgoing nucleon, introducing the effect of final state interactions and the orthogonality between the initial and final states, is also significant to reproduce both the shape and magnitude of the cross section and responses.

### Working Group

WG 2: Neutrino Scattering Physics

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