

Abstract Submitted
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Constraints on the electroweak tensor interaction from exclusive and semi-inclusive hadron production¹ SIMONETTA LIUTI, University of Virginia, AURORE COURTOY, IFPA, AGO Department, Université de Liège, Belgium, MARTIN GONZALEZ-ALONSO, Lyon, IPN — We evaluate the impact of recent developments in hadron phenomenology on constraining the electroweak effective theory Lagrangian beyond the standard model. We focus, in particular, on the scalar and tensor components which can be measured in precision neutron beta decay. We show how a class of new observables, the chiral-odd generalized parton distributions, along with the extraction of the transversity structure function from dihadron electroproduction, can provide for the first time experimental constraints on the tensor charge. Direct experimental extractions if sufficiently precise, provide a more stringent constraint than lattice QCD calculations.

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