

Two-Photon Effects in Elastic Nucleon Form Factors

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In view of the proton radius puzzle and the precision currently achieved in extracting the proton radius from muonic Hydrogen spectroscopy, the two-photon exchange (TPE) corrections between the lepton and hadron are at present the largest source of hadronic uncertainty. I present an overview on recent work within a dispersion relation framework to estimate such TPE corrections both in elastic electron-proton and muon-proton scattering as well as in the interpretation of the muonic Hydrogen spectroscopy. The results are compared to recent CLAS, VEPP-3 and OLYMPUS data as well as to a full TPE calculation in the near-forward approximation, based on unpolarized structure function input. The next steps in this field will be discussed.

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