

GPD studies with hard exclusive processes

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We report on recent results on extraction of generalized parton distributions and relevant form factors from deeply virtual Compton scattering (DVCS) and deeply virtual meson production (DVMP) data. Using the more recent proton DVCS data, we extract the set of leading Compton form factors (CFFs) with uncertainties and, by adding neutron DVCS data, we separate the contributions of up and down quarks to the CFFs H and E utilizing neural networks. We make simultaneous fits to high energy DVCS and DVMP data and demonstrate that extraction of unique GPDs becomes possible at next-to-leading order.

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