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Modern Insights into Elastic Nucleon Form Factors

SEAMUS RIORDAN, University of Massachusetts, Amherst

The electromagnetic elastic form factors of the nucleon provide experimental access to the underlying charge and magnetic moment distributions arranged by the strong nuclear force. These form factors provide excellent testing grounds for QCD and QCD-inspired models and are fundamentally important in understanding non-perturbative strong force physics. By studying them over a broad range of momentum transfers, they provide insight into the underlying mechanisms relevant to the generation of nucleon structure. At low Q^2 there is presently a controversy regarding the charge radius measurements of the proton. At high Q^2, scaling of the form factors are presently being studied in the context of a transition from soft QCD processes. In this talk I will provide an overview of what we learn about nucleon form factors within leading models and calculations, provide an overview of the present experimental status, and summarize plans for future measurements.