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The Proton Form Factor Ratio Measurements at Jefferson Lab

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The ratio of the proton form factors, G_{Ep}/G_{Mp}, has been measured from Q^2 of 0.5 GeV^2 to 8.5 GeV^2, at the Jefferson Laboratory, using the polarization transfer method. This ratio is extracted directly from the measured ratio of the transverse and longitudinal polarization components of the recoiling proton in elastic electron-proton scattering. The discovery that the proton form factor ratio measured in these experiments decreases approximately linearly with four-momentum transfer, Q^2, for values above $\approx$ 1 GeV^2, is one of the most significant results to come out of JLab. These results have had a large impact on progress in hadronic physics; and have required a significant rethinking of nucleon structure. The increasingly common use of the double-polarization technique to measure the nucleon form factors, in the last 15 years, has resulted in a dramatic improvement of the quality of all four nucleon electromagnetic form factors, G_{Ep}, G_{Mp}, G_{En} and G_{Mn}. There is an approved experiment at JLab, **GEP(V)**, to continue the ratio measurements to 12 GeV^2. A dedicated experimental setup, the Super Bigbite Spectrometer (SBS), will be built for this purpose. It will be equipped with a focal plane polarimeter to measure the polarization of the recoil protons. The scattered electrons will be detected in an electromagnetic calorimeter. In this presentation, I will review the status of the proton elastic electromagnetic form factors and discuss a number of theoretical approaches to describe nucleon form factors.