Elastic form factor measurements at Mainz.

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The precision of measurements of the form factors of the nucleon has greatly improved over the last decade. At large four-momentum transfers $Q^2$ the new investigations at Jlab have shown highly significant deviations from the celebrated dipole shape considered until recently as a prove of the vector dominance model. At low $Q^2$ the possibility of a long wave length bump/dip structure has stirred a controversy. In a visual picture in the Breit frame such a structure would indicate a charge contribution extending out to radii larger than 1 fm at variance with some popular models of the nucleon. But, such a charge would also be in clear contradiction to the best dispersion relation description. In this talk a summary of this situation will be given and new yet unpublished results from the Mainz Microtron MAMI for the electric form factor of the proton aiming at a clarification of the bump/dip structure will be presented. It shows that the low as well as the high $Q^2$ data are important for the study of the long distance structure of the nucleon.