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Strange quark contribution to the electromagnetic properties of the nucleon, Results of the Gzero experiment FATIHA BENMOKHTAR, Carnegie Mellon University, GZERO COLLABORATION — The G0 experiment at Jefferson Laboratory measured the parity violating asymmetry in the cross section for polarized electrons scattered at backward angles off liquid hydrogen and deuterium. Measurements were made at two momentum transfers: 0.23 and 0.62 $(\text{GeV}/c)^2$. Combined with forward angle measurements on a hydrogen target the contribution of strange quarks to the proton's charge and magnetization distributions can be determined. These measurements also allow the extraction of the isovector axial form factor as seen in electron scattering. Final results of the complete separation of the strange electric, strange magnetic and the isovector axial form factors are presented. A variety of recent theoretical predictions of these form factors are discussed.

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