

Abstract Submitted  
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**Strangeness Vector and Axial-Vector Form Factors of the Nucleon**<sup>1</sup> DENNIS TRUJILLO, STEPHEN PATE, New Mexico State University — A revised global fit of electroweak  $ep$  and  $\nu p$  elastic scattering data has been performed, with the goal of determining the strange quark contribution to the vector and axial-vector form factors of the nucleon in the momentum-transfer range  $0 < Q^2 < 1 \text{ GeV}^2$ . The two vector (electric and magnetic) form factors  $G_E^s(Q^2)$  and  $G_M^s(Q^2)$  are strongly constrained by  $ep$  elastic scattering data, while the major source of information on the axial-vector form factor  $G_A^s(Q^2)$  is  $\nu p$  scattering data. Combining the two kinds of data into a single global fit makes possible additional precision in the determination of these form factors. The fit makes use of data from the BNL-E734, SAMPLE, HAPPEX, G0, and PVA4 experiments; we will also compare the result of the fit with recent data from MiniBooNE, and anticipate how this fit can be improved when new data from MicroBooNE become available.

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