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# Measurement of Neutral Current Elastic Cross Section in MicroBooNE

The MicroBooNE experiment is an 85 ton active volume liquid-argon time projection chamber located in the Fermilab Booster Neutrino Beamline. MicroBooNE's ability to detect low-energy protons allows us to study single proton events with a four-momentum transfer squared, $Q^2$, as low as 0.10 $GeV^2$. We present a measurement of the flux-averaged neutral-current elastic differential cross section for neutrinos scattering on argon as a function of $Q^2$, as well as our plan to extract the strange quark contribution to the axial form factor. This is not only the least-constrained contribution to the neutral-current elastic scattering cross section but is also crucial for understanding the strange quark contribution to the proton spin.

## Working group

WG2

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**Session Classification:** Poster session NB: do not use Safari; use Firefox, Chrome or Edge