

C5A axial form factor predicted from the bubble chamber scattering data

Analysis of the single pion production data collected in the 12-ft ANL and 7-ft BNL experiments will be presented. It will be shown that successful, simultaneous fit (assuming dipole form of C5A) to both sets of the data is possible if the flux uncertainties are taken into account. The deuteron structure effects are taken into consideration. The obtained fits of C5A will be applied to the NuWro Monte Carlo (MC) generator and then used to predict $\sigma(CC\pi^+)/\sigma(CCQE)$ ratio for the K2K and MiniBooNE experiments. Eventually, I will also present computation of the cross sections for π^0 production in neutral current neutrino-nucleon scattering for T2K experiment. All predicted observables will be presented together with the uncertainties which are determined from the fit.

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