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Anit-Nu/Nu Cross Section Ratio Using P0D+TPC1 Events THOMAS CAMPBELL, EREZ REINHERZ-ARONIS, WALTER TOKI, Colorado State University, T2K COLLABORATION — Recent anti-neutrino data taken by the T2K experiment is used to measure the ratio of the cross sections for charged current interactions of muon type neutrinos relative to anti-neutrinos. Theoretical estimates for charged current quasi-elastic neutrino-quark scattering predict this ratio should be approximately $\frac{1}{3}$. This measurement used the π^0 detector (P0D) and a time projection chamber (TPC1) directly downstream at the ND-280 complex of the T2K experiment. Neutrino interactions occurring in the P0D with an exiting muon whose momentum is measured by TPC1 were selected. Using these events, the ratio was calculated, and relevant systematic uncertainties were evaluated.

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