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# Investigation of the MicroBooNE inclusive neutrino cross sections on Argon

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MicroBooNE data of charged current inclusive neutrino cross sections on argon as a function of different kinematical variables have recently appeared. We compare these data to our theoretical calculations after a brief review of our RPA model and of its successful predictions for the MiniBooNE and T2K cross sections on carbon. Overall we find an agreement with MicroBooNE data in spite of a tendency of underestimation in some specific regions. We also quantitatively compare our model to the ones employed in the MicroBooNE analyses. A new aspect is the availability of the data in terms of the energy transfer to the nucleus, which allows a better separation of the different reaction mechanisms. We focus especially on the results in terms of this transferred energy, for which our model is particularly efficient. We finally discuss the semi-inclusive CC0$\pi$1p and CC0$\pi$Np MicroBooNE results and the compatibility of our multinucleon emission channel with these data.

## Attendance type

Virtual presentation

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