

CU Physics Department Particle Seminar

Wednesday, October 19, 2011 705 Pupin Hall 1:00 PM

Confronting electron- and neutrino-nucleus scattering Can the axial mass controversy be resolved ?

It has been suggested that the difficulties in the interpretation of flux averaged double-differential neutrino-carbon cross section measured by the MiniBooNE collaboration may be due to contributions arising from reaction mechanisms other than single-nucleon knockout. The analysis of the the large data base of inclusive electron scattering data allows one to pin down the role of the relevant mechanisms in a variety of kinematical regimes, thus shedding light on some of the unresolved issues of neutrino-nucleus scattering. As an example, I will argue that it may help to reconcile the different values of the nucleon axial mass reported by the MiniBooNe and NOMAD collaborations.



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