

6th International Workshop on Neutrino-Nucleus Interactions in the Few-GeV Region (NUINT 09)

Contribution ID: 105

Type: **Talk**

Coherent Pion production

Friday, May 22, 2009 3:45 PM (45 minutes)

The second topic of the session will focus on coherent pion production. The session will start with a few brief presentations and then the floor will be open for general discussion. Here, we plan to discuss whether or not we understand the discrepancy between recent NC and CC coherent pion measurements (i.e., the fact that we see evidence for NC coherent π^0 but not CC coherent π^+ production in low energy neutrino experiments). Is there a way to reconcile these results theoretically? Are there alternative measurements or approaches we should be pursuing in the near future to shed further light on the situation? There have also been host of new model predictions in the past year. What are the differences/commonalities between the various theoretical approaches? Is there a preferred approach in certain energy regions? Also, how well do we understand physics of diffractive neutrino scattering in the context of the coherent pion production process? The hope is to leave the workshop with a better global understanding of the coherent pion production mechanism at low neutrino energies.

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