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## Status of the muon neutrino charged-current coherent pion production in the NOvA near detector

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### Abstract

Neutrino cross sections are an essential component to any neutrino measurement. With the modern neutrino experiments targeting to measure precision parameters, such as those in long-baseline oscillation experiments like NOvA, the need for a detailed understanding of neutrino interactions has become even more important. Among the neutrino-nucleus interactions, Charged Current Coherent pion production is currently poorly understood. This talk will give an overview of the status of the Charged Current-Coherent Pion Production (CC-Coh Pion) analysis conducted with NOvA near detector based at Fermilab. Since the NOvA experiment uses a beam with energy 1-5 GeV, the results of this analysis will be relevant for future experiments in this energy range, like DUNE.

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