

CP-Violation and Non-Standard Interactions at the MOMENT

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To measure the last unknown 3ν oscillation parameter (δ), several long baseline neutrino experiments have been designed or proposed. Recently it has been shown that turning on neutral current Non-Standard Interactions (NSI) of neutrinos with matter can induce degeneracies that may even hinder the proposed state-of-the-art DUNE long baseline experiment from measuring the value of δ . After a brief review of models that can give rise to sizeable NSI, we show how the result of the proposed MOMENT experiment with a baseline of 150 km and $200 \text{ MeV} < E_\nu < 600 \text{ MeV}$ can help to solve the degeneracy induced by NSI and determine the true value of δ .

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