## Phenomenology 2016 Symposium



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## Hints for leptonic CP violation or New Physics?

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There are two important missing pieces in the standard three neutrino oscillation framework: The neutrino mass ordering and to establish whether there is CP violation in the leptonic sector. Future neutrino oscillation facilities are being planned to finally determine both unknowns. At the same time, new physics in the form of Non-Standard neutrino Interactions (NSI) can be probed in long-baseline neutrino experiments. In fact, current neutrino oscillation data allows NSI couplings to be 'large' (of the order one compare to the Fermi constant). In this talk I will focus on the determination of the leptonic CP phase by running long-baseline neutrino oscillation experiments (T2K and NOvA) in presence of NSI. I will also discuss the implications of our results for the future neutrino program.

## Summary

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