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## Exploring the Potential of Short-Baseline Physics at Fermilab

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We study the capabilities of the short baseline neutrino program at Fermilab to probe the unitarity of the lepton mixing matrix. We find the sensitivity to be slightly better than the current one. Motivated by the future DUNE experiment, we have also analyzed the potential of an extra liquid Argon near detector in the LBNF beamline. Adding such a near detector to the DUNE setup will substantially improve the current sensitivity on non-unitarity. This would help to remove CP degeneracies due to the new complex phase present in the neutrino mixing matrix. We also comment on the sensitivity of this setup to light sterile neutrinos for various configurations

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