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Expected sensitivity of the NOvA muon neutrino disappearance analysis KIRK BAYS, Caltech, NOVA COLLABORATION — NOvA is an 810 km long baseline neutrino experiment utilizing the NuMI beam aimed towards a 14 kton liquid scintillator far detector that is currently being constructed. NOvA is designed to study both electron neutrino appearance (allowing a precision measurement of θ_{13} and possible determination of the mass hierarchy and any CP violation) and muon neutrino disappearance (giving a precision measurement of θ_{23} and the atmospheric mass squared difference). Presented here is the expected sensitivity reach of the NOvA muon neutrino disappearance analysis, showing that NOvA can significantly improve the world's current best knowledge of both θ_{23} and $|\Delta m^2_{atm}|$.

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