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Search for sterile neutrino oscillations with MiniBoone REX TAYLOE, Indiana University, MINIBOONE COLLABORATION — The MiniBooNE experiment, located at Fermilab on the Booster Neutrino Beamline, has searched for $\nu_\mu \to \nu_e$ and $\overline{\nu}_\mu \to \overline{\nu}_e$ oscillations in the range $0.1 < \Delta m^2 < 5.0$ ev^2 as indicated by results from the LSND experiment. MiniBooNE completed a phase of running in April 2012 after collecting 11.3×10^{20} protons-on-target (POT) in $\overline{\nu}_\mu$ mode and 6.5×10^{20} POT in ν_μ mode. The combination of those data sets shows a 3.8σ excess over background, consistent with that expected from the LSND result. These results along with other evidence for sterile neutrinos and plans for additional running will be presented.

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