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Testing the LSND/MiniBooNE Signal with OscSNS and BooNE RICHARD VAN DE WATER, GEOFF MILLS, BILL LOUIS, Los Alamos National Laboratory — With the recent announcement from MiniBooNE of an antineutirino event excess consistent with LSND oscillations, it becomes prudent to further study the claimed signal. This can be done with an experiment at the Spallation Neutron Source, which is a stop pion neutrino source similar to LAMPF, but with higher intensity and shorter duty cycle. A 1kton oil detector at 60 m from the source could reproduce the LSND signal at over 5 σ in one year of running. Another possibility is a second MiniBooNE detector at FNAL that is at 200 m from the neutrino source, compared with the current detector at 500 m. This would allow convincing test for neutrino oscillations in both neutrino and antineutrino mode at a near detector position. The physics reach and the pros and cons of each proposal will be discussed.

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