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Analysis of a Proposed Long Baseline Neutrino Oscillation Experiment CHRISTINE LEWIS, Columbia University — The Long Baseline Neutrino Experiment Study aims to find the best configuration for a second generation, accelerator-based neutrino experiment. One possible arrangement would use a baseline of 1300km, running from FNAL to the Homestake mine. Using a large water Cherenkov detector and a powerful beam, it will contribute to improved measurements of the neutrino oscillation parameters. This talk will focus on the experiment's sensitivity to the currently unknown mixing angle, θ_{13} , and CP violation phase, δ_{CP} , calculated using the GLoBES software.

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