Neutrino oscillations: latest mixing parameters\textsuperscript{1} DAVID ERNST, BERNADETT COGSWELL, Vanderbilt and Fisk Universities, DAVID LATIMER, Reed College, JESUS ESCAMILLA ROA, Vanderbilt University — Assuming three neutrinos, the neutrino oscillation mixing parameters are extracted from a global analysis of the Super-K atmospheric, MINOS disappearance and appearance neutrino, CHOOZ, T2K, KamLAND, and all solar data. MINOS anti-neutrino data is not included. The full oscillation probabilities are used so that we can address the question of the sign of $\theta_{13}$. How to extract the allowed confidence level regions without assuming Gaussian statistics is explain. The probability that $\theta_{13}$ is negative will be given, as well as the probability that Double CHOOZ and Daya Bay will measure a non-zero value of $\theta_{13}$. Correlations between $\theta_{13}$ and $\theta_{23}$ will be examined.

\textsuperscript{1}Supported, in part, by US DOE and Mexico, CONACyT.