Some recent results in the phenomenology of neutrino oscillations\textsuperscript{1} DAVID ERNST, JESUS ESCAMILLA-ROA, Vanderbilt University, DAVID LATIMER, University of Kentucky — As the phenomenology of neutrino oscillations enters a new era of precision data, analysis must be mindful of small effects, such as linear terms in the mixing angle $\theta_{13}$. The existence of these terms invalidates analyses done in terms of the square of this mixing angle and gives rise to the question of what is the sign of the angle, not just is its value non-zero. Results from a recent analysis of the world’s data which uses exact oscillation probability formulae will be presented, with a focus on the role of the linear in $\theta_{13}$ terms in determining this angle and in discriminating between the two hierarchies.

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