## Abstract Submitted for the APR08 Meeting of The American Physical Society

Deconstruction of atmospheric neutrino oscillation data DAVID ERNST, JESUS ESCAMILLA, Vanderbilt University, DAVID LATIMER, University of Kentucky — Atmospheric neutrinos are statistically the most important subset of neutrino oscillation data and they cover a range of L/E values that span four orders of magnitude. However, atmospheric data is the most complex to analyze because the source is neutrinos produced in the atmosphere by cosmic rays and because this data is the only data which measures the direction of the created lepton. We examine bin by bin the average and rms values of the physics parameters associated with each bin and thus ascribe the importance of each bin for determining the oscillation parameters, including theta\_13.

David Ernst Vanderbilt University

Date submitted: 14 Jan 2008 Electronic form version 1.4