

Abstract Submitted
for the NWS06 Meeting of
The American Physical Society

Koide's Mass Formula for Neutrinos CARL BRANNEN, Liquafaction Corp. — We derive Koide's mass formula as an eigenvector equation. We show that to within current experimental error, the square roots of the masses of the charged leptons follow the simple equation $(m_n^-)^{0.5} = \mu_1(1 + \sqrt{2} \cos(\delta_1 + 2n\pi/3))$ where δ_1 is the interesting number .22222204717(48) and μ_1 is a constant. Next we generalize the Koide formula to the neutrinos by assuming that the square root of the mass of the smallest neutrino must be taken to be negative. Then masses of the simple form $(m_n^0)^{0.5} = \mu_0(1 + \sqrt{2} \cos(\delta_1 + \pi/12 + 2n\pi/3))$ where $3 \mu_0 = 3^{12} \mu_1$, satisfy recent neutrino oscillation measurements close to the centers of the error bars. Finally, we discuss the preon model for the fermions that led to the above discovery.

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Date submitted: 13 Apr 2006

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