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A tricky method for indirect measurement of electron Antineutrino mass AHMAD REZA ESTAKHR, Independent Researcher — During beta decay of rest neutron, an electron anti neutrino is also emitted.  $n_o \rightarrow p^+ + e^- + \overline{\nu}_e$  by detecting momentum of proton and electron after decay and by using conservation laws of einstein's theory of relativity, i realized (indirectly) that electron anti neutrino is photon-like particle  $E = \vec{P}c = \vec{P}_e c = \vec{P}_p c$  and its mass is  $\overline{\nu}_e = \frac{E}{c^2} = 0.545626 \frac{Mev}{c^2}$ Essential Results:  $n_o = E_p + E_e + (E = \vec{P}c) = \sqrt{\vec{P}_p^2 c^2 + p_o^2} + \sqrt{\vec{P}_e^2 c^2 + e_o^2} + E_{\overline{\nu}_e}$ where the  $p_o$  denotes Energy of rest proton and  $e_o$  denotes Energy of rest electron.  $(E = \vec{P}c)$  denotes photon-like anti-neutrino.  $\alpha_w = \frac{\vec{P}_e c}{E_e} = \frac{1}{1.370073665}$  This is electron weak-structure constant (it is almost 100.0 times stronger than fine-structure constant)

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