Abstract

Although more than one decade ago, neutrino oscillation has been observationally established still there is some controversy over the validity of the so-called standard formula for neutrino oscillation. In the talk, I will verify the standard formula by formal treatment of neutrino wavepackets within quantum mechanics. I will then revisit the problem within quantum field theory treating neutrinos as intermediate states between production and detection. I will show that these two approaches lead to the same standard formula.