Oscillation Amplitude for Neutrino Wave Packets LUCA VISINELLI, University of Utah/Physics Department — We present an expression for the transition amplitude between two neutrino flavors in terms exclusively of the neutrinos’ mass eigenstates. The analysis followed does not contain any theory concerning neutrino production and detection processes. However, the final expression for the amplitude found happens to behave consistently with other formulas obtained in different ways, and shows the correct ultra-relativistic limit studied by Pontecorvo. A numerical analysis is performed to show the behavior for the expression in the case of two neutrino generations.