flavor space : $\begin{pmatrix} \nu_e \\ \nu_\mu \\ \nu_\tau \end{pmatrix}$

12 stabilizer $|\psi_i\rangle$ $\xrightarrow{\text{neutrino oscillation}}$ $|\psi_o\rangle$

$$|\psi_o\rangle = P^\dagger U P |\psi_i\rangle$$

$$P \begin{pmatrix} \nu_e \\ \nu_\mu \\ \nu_\tau \end{pmatrix} = \begin{pmatrix} \nu_1 \\ \nu_2 \\ \nu_3 \end{pmatrix} : \text{PMNS}$$

$$U : \begin{pmatrix} e^{-iE_1 t} & & \\ & e^{-iE_2 t} & \\ & & e^{-iE_3 t} \end{pmatrix}$$

$$M_2(|\psi_2\rangle) = -\log \sum_{PEP_n} \frac{1}{3} \langle \psi_0 | P | \psi_0 \rangle^4.$$

$$\overline{M_2} = \frac{1}{12} \sum_{i=1}^{12} \frac{1}{L} \int_0^L M_2(|\psi_2\rangle) \quad \text{for } L \text{ long enough.}$$

$\overline{M_2}$ is dependent on $\delta, \theta_1, \theta_2, \theta_3$, mass order