DUNE Exercise: Considering the disappearance channel at Dune (well described by a 2-families probability), estimate its sensitivity to non-standard interactions by the effects on mixing angle and squared mass differences.

- Look for the DUNE's precision in stablishing the values of  $\Delta m^2$  and  $\theta_{23}$
- Analyse the effects of  $\varepsilon$  's on effective  $\Delta m^2$  and  $\theta_{23}$
- Estimate the limits obtainable on  $\varepsilon$  's.