

T2K+SK+reactors meeting: SK and T2K sides

*Pablo – IFIC & CSIC
2018/01/25, T2K+SK+reactors meeting*

SK+T2K joint analysis (T2K-SK group)

They use the Osc3++ analysis framework, but also some comparisons with Mach3 and BANFF

Most important studies are systematics related and will be useful for us

The reactor and solar oscillation parameters are fixed and their uncertainty taken into account as systematic errors

SK atm is starting to use fitQun as in T2K, instead of Aprofit

Studies for increasing SK fiducial volume

SK atm analysis is moving towards officializing the advantages of neutron tagging (new samples and energy correction), but this will not be included in their joint analysis, although initially planned

Preliminary plan

As suggested by Pau, it is a good idea to first divide the group into two main goals:

- T2K+SK: UAM, mainly David (and Pablo)

David joins the SK+T2K joint analysis group already formed within the T2K-SK group

I will show David all the SK atm. neutrino analysis

I will try to keep being part of this group, although it is getting more difficult

David will get expertise with the VALOR analysis framework

Once this analysis is familiar to us and we get expertise with VALOR, propose this group to make the joint analysis using the VALOR framework

Preliminary plan

- T2K+reactors: IFIC, mainly Masha, Pau

Follow the path suggested by Pau in the previous meeting, Pau taking charge of most of the reactor-related analysis and Masha for the T2K analysis, using VALOR