

Sensitivity for DAE δ DALUS and Hyper-K

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GLOBES

- Preliminary tests have already been done by Professor Shaevitz in Fortran.
- Additionally, Rachel Carr performed simulations of DAE δ DALUS with smaller mass (300ktons). Since then, specs have changed, along with parameters.
- Used by many neutrino groups, will give more credibility to our results.

Initial Changes

- Parameters:

theta13 changed from .0158 to .0920

theta12 changed from .143 to .595

theta23 remains $\pi/4$

Delta masses also updated (minor changes)

- Make file updated

Results

- Modified example1.c to work with daed.1.5.glb (one of Rachel's files).

Log(10,s22th13) deltacp chi^2

-4 0 0.000000

-4 4 0.000000

-4 8 0.000000 ...

- There's more, but you get the idea. Incomplete, but a beginning approach. I'm in the process of modifying an example.c file that will extract the sensitivity from DAE δ ALUS specs (and Hyper-K, eventually).

In conclusion...

- Things are starting to work! Yay! Sorta.