






Steriles and Gen-2 Modules Kareem


Check out [arxiv:1805.11717!](https://arxiv.org/abs/1805.11717)


 **kunD** 9:22 PM
yes, it did 😊

 **Kay** 9:24 PM
OK, so how can we access the current shovel on the screen?

 **kunD** 9:27 PM
dataio-pyshovel Data.i3(.gz).bz2)


 **Kay** 9:27 PM
Awesome, thanks @kunD

 **kunD** 9:27 PM
its mentioned in the slides as well 😊

 **Kay** 9:29 PM
Oh yeah xD I'll load them up


 **Kay** 9:39 PM
Instead of printing `frame.keys()` to list all the keys in the frame, you can also use autocomplete via [Tab] right? In case you don't want to print to terminal all the keys

 **dschultz** 9:40 PM
sometimes autocomplete isn't very smart and will give you excess options that aren't real. not sure if it works for this


 **Kay** 9:44 PM
Ah ok then,
So this might be silly, but does steamshovel's geometry file encode up to date ice models? For example dust layer, hole ice etc.
And are there some fundamental keys relevant to current analysis, or is this highly dependent on which working group your apart of?

 **dschultz** 9:46 PM
there is a project specifically for ice models (it's not in the geometry)

 **zgriffith** 10:13 PM
this is the notebook for the next exercise: <https://icecube.wisc.edu/~mamday/BootCamp%202014-i3%20Files.html>

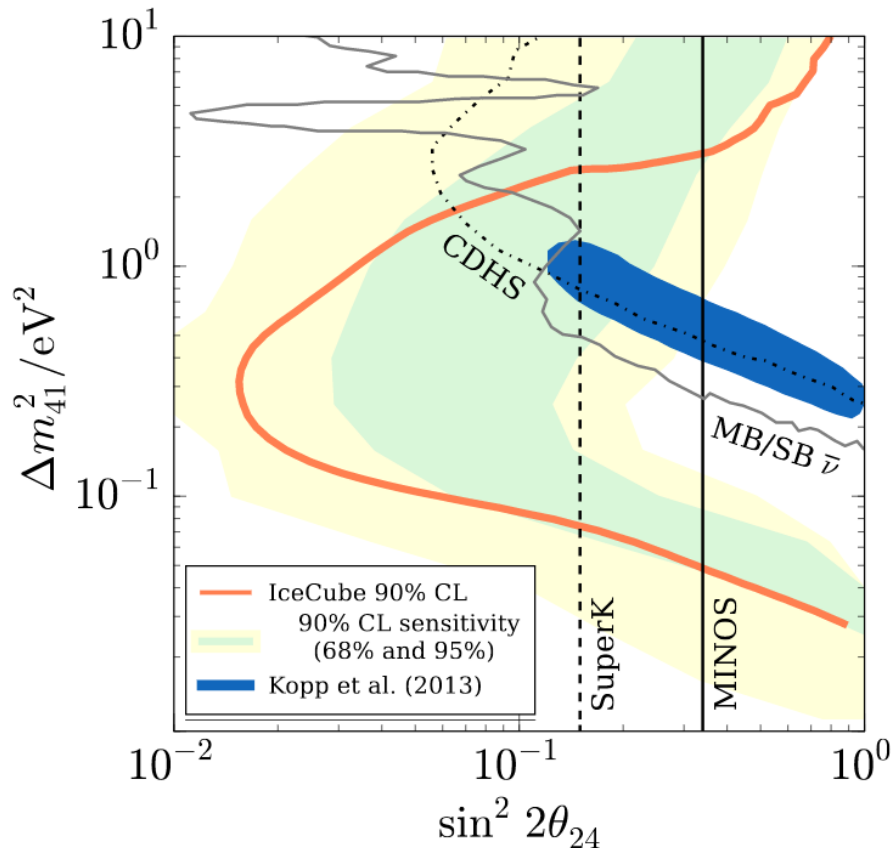
 **Kay** 10:19 PM
I don't think there is sound on the video

 **flambda** 10:49 PM
(bed is calling, thanks for the bootcamp and the livestream so far!)

 **Kay** 10:58 PM
How's this -
start while loop

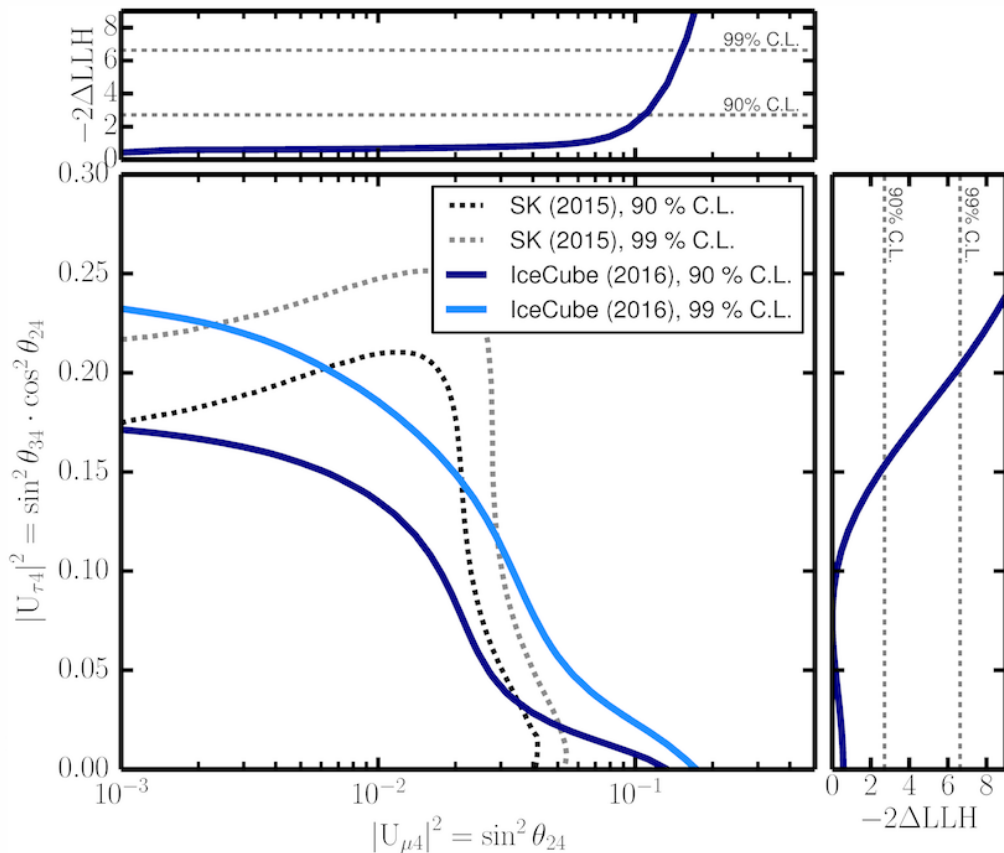


Icecube searched for eV sterile neutrinos...



- But drew a blank (99% C.L.)
- Neutrino energies 320 GeV to 20 TeV

Icecube searched for eV sterile neutrinos...

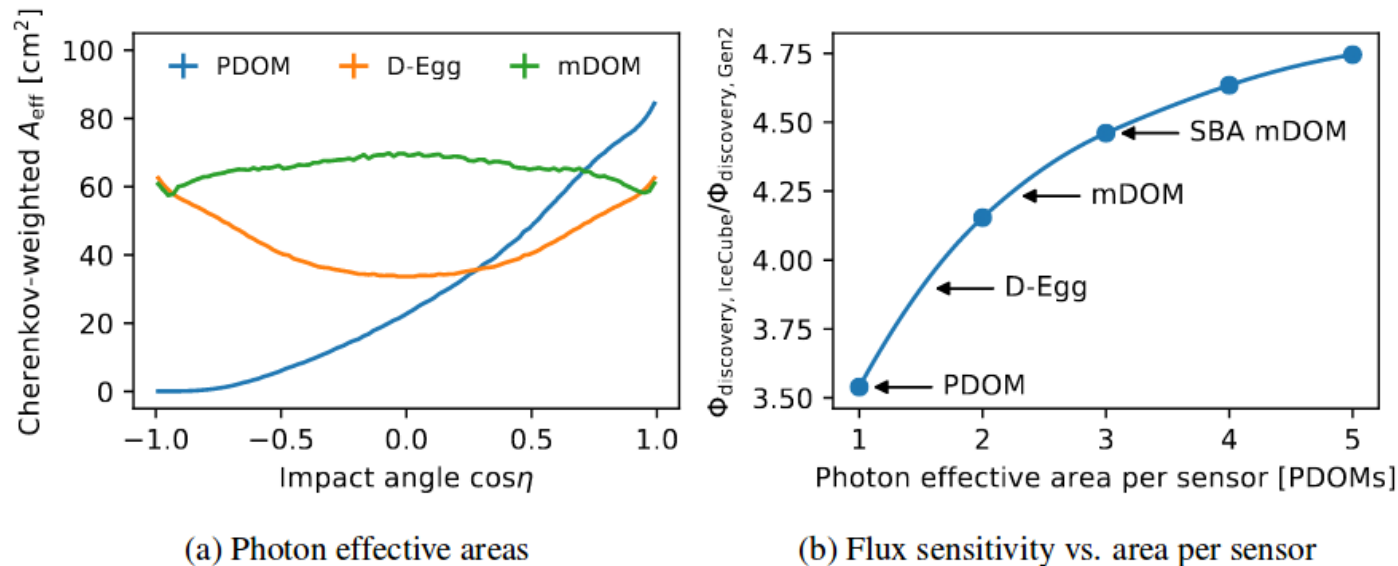


But drew a blank (99% C.L.)

Neutrino energies 320 GeV to 20 TeV

Then (2017), 10-60 GeV (DeepCore) neutrinos probed – still nothing...

We will gain more sensitivity with new modules!



- The sunflower array of Gen2 in principle could discover sources $\sim 3.5x$ fainter than Icecube
- Increase each sensors effective area by 3-4.5 times

Thank you!

