Sanford Lab Round Table

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Things my group searches for:

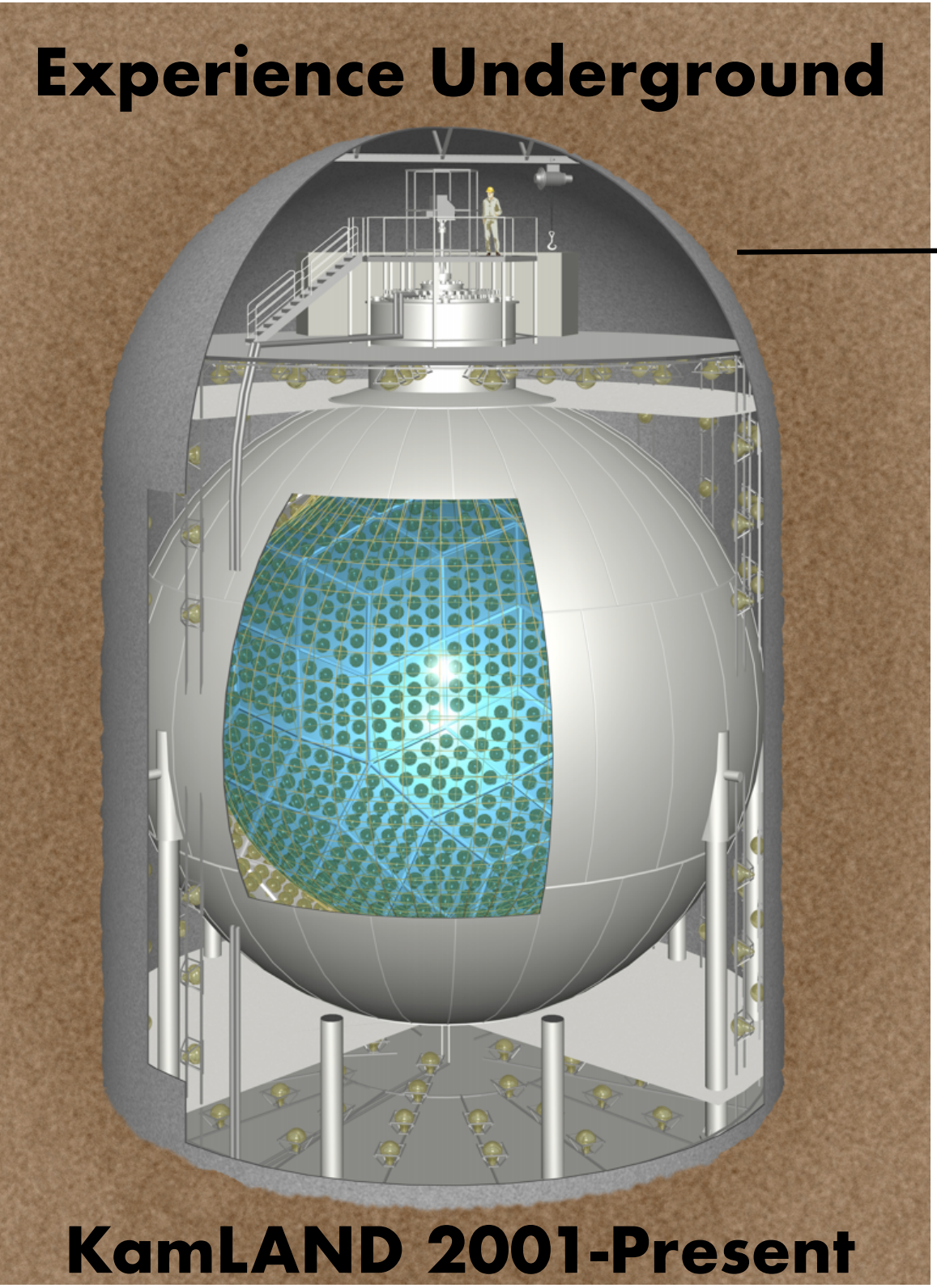
Axion
Dark Matter

I don't think its Underground Science.

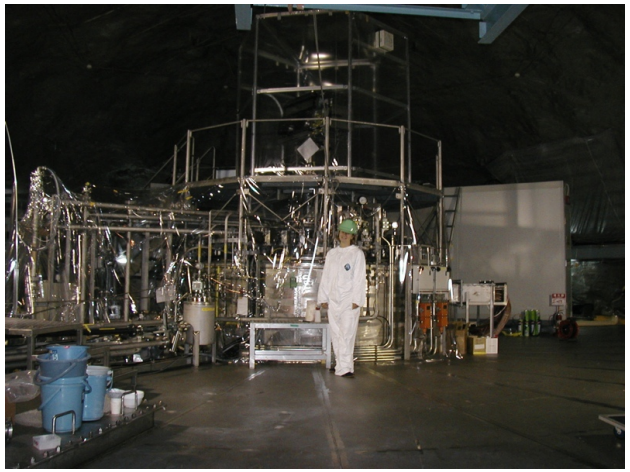
Neutrinoless Double-Beta Decay

Underground Science

Experience Underground

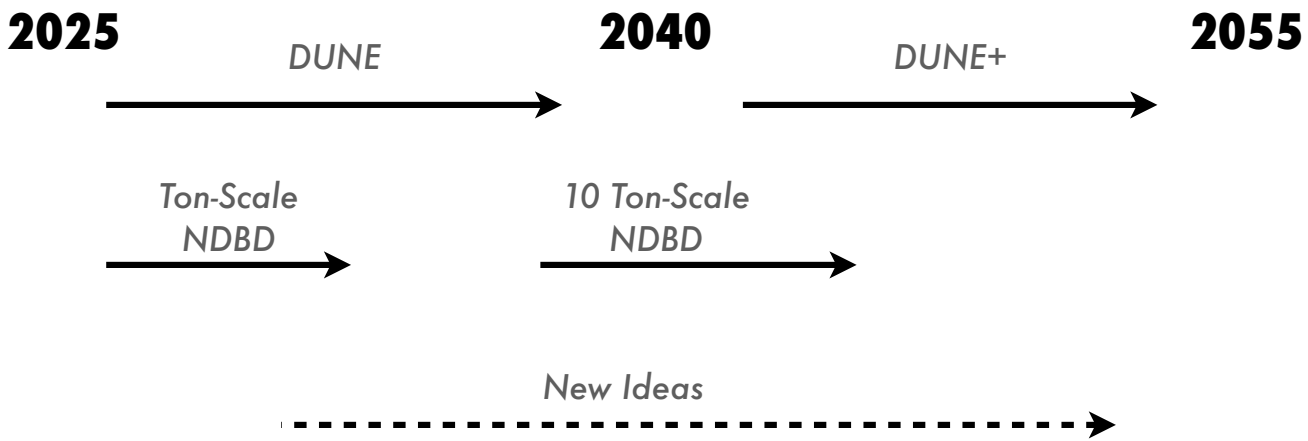


KamLAND 2001-Present



This is me as a graduate student taking care of the detector.

My Predictions for Neutrino Physics



Neutrino experiments will inherently need to be run underground. I also think on the timescale of 2030 we will have solidified our understanding of key parameters, but just like in dark matter, we need a multiplication of **new ideas** *to go after new physics. Perhaps its non-standard neutrinoless double-beta decay mechanisms, perhaps its precision measurements from an intense co-located neutrino beam.*

My Thoughts

- The lab has great momentum with LZ operations and DUNE construction.
- The question is should the focus be on continuing to attract projects of that scale, are there resources for projects of that scale, or does the lab need to diversify the type of project?
- With smaller projects its hard to have the staffing at the lab needed to support construction/maintenance etc.
- I think the lab needs an institute, its KIPAC to SLAC etc. I think there is an important geographic argument and the lab has been successful with private money in the past. If I were planning it, I would make a postdoctoral prize fellowship attached with resources to start small new initiatives.