Depth paper status

Simulations done

- Ge: ~140 liveyears (overzealous student, but really good statistics)
- Ar: ~20 liveyears
- Xe: ~2 liveyears + 10 liveyears with previous muons, consistent with updated 2 years
- All three sets of data have been analyzed for rates

Paper edited

- Numbers from website have been added along with text analyzing the numbers
- Xe and Ge geometries are identical, but Ar geometry differs, as requested by Hime, so not all comparisons are apples to apples

Numbers in paper

	Ge	LXe	LAr
Events per year that have at least one nuclear recoil (no other cuts, except energy deposition > 5 keV)	157	388	394
Events per year that have at least one nuclear recoil and are in the energy range of interest	135 (10-100 keV)	148 (5-25 keV)	3.66 (50-100 keV)
Rate of Single WIMP candidates in entire volume (All analysis cuts except fiducial and veto)	8.30 E-8	< 1.49 E - 8	1.60 E -8
Rate of Single WIMP candidates in fiducial volume (ignore veto)	N/A	< 1.49 E - 8	< 1.60 E -9
Veto ratio (vetoed:unvetoed) for single WIMP candidates in the fiducial volume	117:0	0:0	???
Veto ratio for multiple nuclear recoil	9081:9	6978:0	???

- Note for Ar: the proposed detector really doesn't have the resolution to differentiate between singles and multiples. Only one veto ratio exists.
- No fiducial volume cut is applied to Ge, so rate is the same as before the cut.
- We have fluxes of muons/neutrons before shield, but these are consistent with each other. Do we need a table with these numbers as well?

To-do list

- #1: need to compile data in one place to make plots to compare Xe/Ar/Ge
- Depth group needs to edit text as a group
- Timescale: 3 weeks