Zoom link for parallel session: https://fnal.zoom.us/j/3288157593 (Mike Mooney's)

Comment from Mike Mooney: 1 kV/cm field at ND vs. 500 V/cm field of FD… this is a ND vs. FD difference that may be in want of some thought. For instance, recombination effects no longer cancel out in "ratio" like they would if they were at same E field…(this matters for DUNE-Prism and they should be told that)

Caltech: Photodetector in protoDUNE and interested in ramping up for Pixel Electronics testing and other testing. Has willingness to contribute to project management side

Need to circulate the numbers which clearly define the physics performance to help define what the calibration needs are

Physics Studies:

Optical modularization:
What are the requirements on optical modularization and optical system performance to enable correct re-association of 'disconnected energy' (neutrons, gammas)
Q [M. Mooney]: What back-of-the-envelope calculations have been done?
See work by C. Marshall and P. Koller. More work is still needed.
Q [M. Mooney]: Can quick studies still deliver useful results?
Yes.

Dead Space:
What are the physics requirements on inactive space between TPC modules?
Q [J. Yu]: What are the assumptions on 'fiducialization' of the active TPC region? Field uniformity at boundaries?
Very weakly constrained at this point. Needs clearer motivation.

Exiting Muons:
What are the physics requirements on matching muons exiting the LArTPC into downstream detector (resolution, bias, etc.)?

Physics Measurements (each group understanding their own limitation and their complementarity of these measurements)
Nu_Mu-CC Inclusive (Flux x cross-section x detector response)
nu-electron scattering (Flux normalization and spectral info)

Low-nu measurement (spectral info)
nu_e cc inclusive measurements
Neutral Current Inclusive

Consider a dedicated ND LArTPC analysis workshop?