

Reorganization of Physics WG structure – see slides from Nov 8 Collaboration Call

NDK/High-E is now High-E

High energy WG: a much broader set of sources and signatures, typically >50 MeV.

Includes ongoing BNV and atmospheric neutrino analyses plus astrophysics and BSM searches that involve full sim/reco and can naturally share tools with other analyses in the group

And we have Yun-Tse Tsai replacing Greg Pawloski as a convener

High-E WG Tasks:

High priority:

- Continued work on $p \rightarrow \nu K$ selection efficiency (show we can achieve 30% efficiency) - in progress
- Continued work on n - \bar{n} studies - in progress
- Production of large samples of atmospheric neutrinos for proton decay and n - \bar{n} background studies - in progress
- Continued study of FSI and the impact on proton decay/ $n\bar{n}$

Medium priority:

- Atmospheric neutrino oscillation analysis based on fully simulated and reconstructed samples
- Study of cosmogenic background to nucleon decay based on realistic event reconstruction
- Feedback to reconstruction experts about reconstruction for events of interest to the high-energy group
- ν - τ appearance (study based on full simulation and reconstruction)
- boosted dark matter (study based on full simulation and reconstruction)

Other:

- Studies of other nucleon decay modes
- Identify other high-energy topics to investigate
- Find a dedicated person to work on developing special reconstruction tools for events of interest to the high-energy group