Neutrino Frontier

"Topics relevant to physics associated with neutrinos"

NF01: Neutrino oscillations

NF02: Understanding experimental neutrino anomalies

NF03: BSM

NF04: Neutrinos from natural sources

NF05: Neutrino properties

NF06: Neutrino interaction cross sections

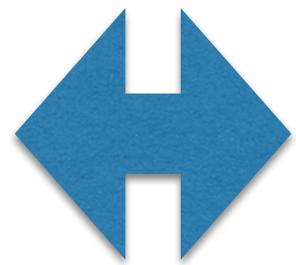
NF07: Applications

NF08: Theory of neutrino physics (also TF11)

NF09: Artificial neutrino sources

NF10: Neutrino detectors

+ strong ties to all other frontiers



LBNL involvement

Long baseline: DUNE, THEIA
Oscillations: Daya Bay, IceCube, THEIA
DBD: CUPID, LEGEND, SNO+*, THEIA
Nu mass: Katrin
Nonpro: NEO, Eos/THEIA
Detector development
Material properties
Theory

This session

Focus on 3 areas of opportunity where LBNL has unique expertise,
and can / does have significant impact

1. Long baseline physics: DUNE and other options - Dan Dwyer (Physics)

2. Double beta decay into the NH, and low-energy physics - Alan Poon (NSD)

3. Neutrinos for nonproliferation - Bethany Goldblum (NSD)

Brief overview of the open questions and LBNL's role in the field

Time for questions

Intended to spur further conversation,
plan for follow-on workshops to delve into more detail!