Nu1 - Organizational Issues

Talks

- Please post your talks at beginning of session so that we can refer to them during session and discussions. This is a "workshop".
- Talk times include questions for clarification but not for discussion.

Discussion

- Time for discussion reserved at end of session.
- Note takers will capture discussion and important issues. Will make available after workshop.
- Conveners will try to understand metrics for new experiments and proposals for the context of subgroup report.
- Discussion will/may generate homework for experimental groups. Follow up by ANL workshop.

Subgroup Report

- Will draft report outline following this workshop. There will be opportunities for community comments and input through April-June.
- Will ask summary speakers + expert "volunteers" for written contributions.

Community Input

- Email conveners with any questions and concerns
 - Mary Bishai < mbishai@bnl.gov >
 - Karsten Heeger < heeger@wisc.edu >
 - Patrick Huber <<u>pahuber@vt.edu</u>>

Metrics for Discussion of Neutrino Experiments (I)

Science goals

- 1) discovery potential
- 2) physics topics and parameter sensitivity
- 3) is science unique?
- 4) are there other competing experiments?
- 5) complementarity with other experiments?

R&D requirements

- a) ready for proposal or construction
- b) limited R&D sufficient (1-2 years)
- c) long-term R&D required (> 2 years)
- d) synergies with other experiments?
- Cost categories (indicate separately categories for US contribution and total project cost, no precise estimates needed)
 - (I) < \$5M (\$) minor construction (below threshold for project reporting)
 - (II) < \$50M (\$) e.g. Daya Bay-like, less than LBNE underground option
 - (III) \$50-300M (\$\$) e.g. NOvA, mu2e, IceCube-size
 - (IV) > \$300M (\$\$\$) e.g. LBNE-I
 - (V) > \$1B (\$\$\$\$) e.g. LBNE-II, NuFact, beta beams

Metrics for Discussion of Neutrino Experiments (II)

Synergies

- 1) with other experiments?
- 2) with other fields and frontiers?

US collaborations and leadership

- a) US leadership?
- b) US based experiment/facility?
- c) opportunity for international engagement?
- d) continued international collaboration?

Timeline and projected schedule

- a) R&D timeline
- b) construction time
- c) data taking and science program duration