**Fermilab Short-Baseline Neutrino Program Working Meeting**

**Fermilab, April 30 – May 2, 2014**

There are several questions that have come up which should be discussed in detail and on which we can hopefully come to clear conclusions during our meeting. There are certainly others, and it’s probably useful to list important questions before the meeting, so please send additions to this list:

1. New alternative proposed layout: MicroBooNE as Near detector and ICARUS T600 as Far (500 m?): what are the benefits on physics reach, time schedule and cost?
2. Sensitivity assumptions: The sensitivities for nue appearance presented by the LAr1-ND and ICARUS collaborations seem to have some differences even when evaluating very similar configurations.  In order to converge, it would be helpful to discover what creates this difference.  Is it a difference in input assumptions or calculation methods?
3. Neutrino beam spectra at different distances from target.
4. Near Detector size: Do we gain in the physics capabilities by enlarging the ND?  What are the cost and schedule implications of such a change?
5. Location of ICARUS T600:  Is the physics impacted by locating the FD at the surface, amounting to ~10m off-axis? What are the cost savings relative to locating on-axis?
6. Far Detector size: Is it possible to increase mass at far detector with new module(s)? What impact would added mass at FD location have on physics reach?

The first day will be more structured with presentations to outline the current ideas and developments both by the experiments and Fermilab.

Agenda:

**Wednesday, April 30 (overview and updates)**

9:00 Welcome and Introduction (Nigel Lockyer/Greg Bock) – 15m

9:20 Fermilab SBN Program Planning, Facilities, etc. (Peter Wilson, FNAL) – 20m

10:00 Buildings: ND and FD Civil Construction (Steve Dixon, FNAL) – 20m

10:40 Coffee Break

11:10 LAr1-ND Overview and Physics Updates (Dave Schmitz/Ornella Palamara) (30m) 12:00 Lunch

1:00 ICARUS + MicroBooNE: Combination for a Definitive Dual Detector Experiment (Alberto Guglielmi) – 20m

1:40 ICARUS overview and Physics Updates (Daniele Gibin) - 20m

2:20 Infrastructure Needs of the ICARUS T600 detector (Claudio Montanari) 20m

3:00 Coffee

3:30 Discussion: Define goals for studies/calculations/estimates to be done on Thursday - Alberto, Bonnie, Dave, Peter

5:00 Adjourn

6:30 Dinner at restaurant - TBD

**Thursday, May 1 (working day)**

Unstructured working time and informal meetings

**Friday, May 2 (conclusions and outcomes)**

9:00 Updates, Conclusions on FNAL infrastructure (Peter Wilson)

9:30 Updates, conclusions on physics – topic 1

10:00 Updates, conclusions on physics – topic 2

10:30 Coffee

11:00 Updates, conclusions on physics – topic 3

11:30 Updates, conclusions on physics – topic 4

12:00 Lunch

1:00 Discussion: Plan for next steps

3:00 Meeting Adjourn

People are leaving Fermilab around 3:00 pm