21 May 2011

Future Neutrino Facilities in the Global Physics Environment

Proposed Questions for NuFact11 Round Table
by the NUFACT11 Scientific Program Committee

(NB emphasis is placed on neutrino oscillation experiments)

1. Is the "incremental" approach to experimental neutrino oscillation physics the best way for the international community to proceed, or should a big step to a Neutrino Factory be advocated? If a big step is deemed appropriate, when should it be envisioned?

2. Up to what levels do you think the regional neutrino programs should work, and when and how do you envision that a fully international framework of neutrino projects is needed and should be formed? What do you think is "missing" that prevents a decision being made on a large international neutrino project: a determination of θ_{13}, a community consensus, a political decision at ICFA level, technological issues…?

3. What room do you see for accelerator-based neutrino projects besides the other particle physics projects (e.g. in Europe besides the LHC)?

4. What might be the scientific impact of LHC results on the neutrino program?

5. What do you think are the most important goals in neutrino oscillation physics and what do you think are the best ways to get there? What relative importance/organization should be given to the mainline program (unraveling 3x3 mixing including CP violation) with respect to search for exotics such as sterile neutrinos, Non-standard interactions, etc

6. How important is it that proposed giant neutrino detectors serve additional physics needs – how bad is it if they don't?

7. What importance do you attach to the Neutrino Factory being on the upgrade path toward a Muon Collider?