Statement of Principles for Data Sharing, Analyzing, and Publication within the SBN Program

The text of this document was agreed upon by all attending members of the SBN Oversight Board at their 8 March 2019 meeting.

This document lists a set of principles to be followed within the SBN program. A list of members of the SBN program can be found at the end of this document. The list is maintained as Annex 1 of the SBN Multi-Institution MOU and updated by the SBN IB Chair.

These principles cover the sharing, analysis, and publication of data from the SBN Near Detector and the SBN Far Detector. These principles form the basis for a separate document that establishes detailed rules and procedures grounded in the principles of this document and possibly including MicroBooNE data and/or analysis results

These principles do not replace any statements in the 14 March 2018 SBN Organization Document. In particular, the following statements continue to hold – "the joint SBN physics program is taken to start when both the ICARUS and SBND detectors become operational", and "The SBN physics program will include both a set of multi-detector joint oscillations measurements as well as measurements carried out independently by each experiment".

The SBN Analysis Working Group (and associated sub-groups) leads the development of the methods and tools needed to execute the combined SBN physics analyses. Work focuses on building reconstruction and analysis tools within a common framework and developing and end-to-end common analysis scheme. Access to SBN detector data will be crucial to achieving the goals of this effort and preparing the SBN oscillation analyses.

Principle 1: A common strategy for data taking with each detector will be agreed to ensure the data can be properly combined in a joint analysis.

- This includes, but is not limited to, trigger logic, run conditions, and run duration
- The raw data needs to be validated and that will be developed and spelled out in the procedures.

Principle 2: All data taken at Fermilab by either the near or far detector are to be made available promptly and with equal access to any member of the SBN program.

- Publication or presentation of that data will fall under Principle 5.

Principle 3: All software tools developed for the analysis of near or far detector data are fully available to any member of the SBN program.

Principle 4: Any member of the SBN program may pursue any analysis topic that they wish.

- Publication or presentation of that data will fall under Principle 5.

Principle 5: Any publication or presentation that uses data or software tools from either detector will be submitted to a two step process before being made public:

1. **Decide the author list (if there is one)**
2. **Go through an appropriate process of review within the SBN program**

The results will not be made public until the review process is successfully completed.

- The mechanisms of these reviews will be spelled out in the procedures that are written based upon the principles of this document.
- The appropriate process of review will vary depending on the author list.
- Including tools as well as data in this principle ensures that, for instance, experiment sensitivity plots are covered.
- Mechanisms will be put in place to ensure that any questions or concerns about an analysis can be resolved before the analysis is published or made public.

Members of the SBN Program

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