

# Update on the SBN Organization

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Fermilab Physics Advisory Committee

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# SBN Organization

The SBN Organization comprises “a set of organizational structures are defined to oversee the completion of the ICARUS and SBND detectors, to develop plans and procedures for their commissioning and operation, and to coordinate efforts toward combined physics analyses in the future.”

## External References:

1. [Founding Document of SBN Organization](#) (March 2018)
2. [Statement of Principles for Data Sharing, Analysis, and Publication for SBN Program](#) (March 2019)

# SBN Organization: What

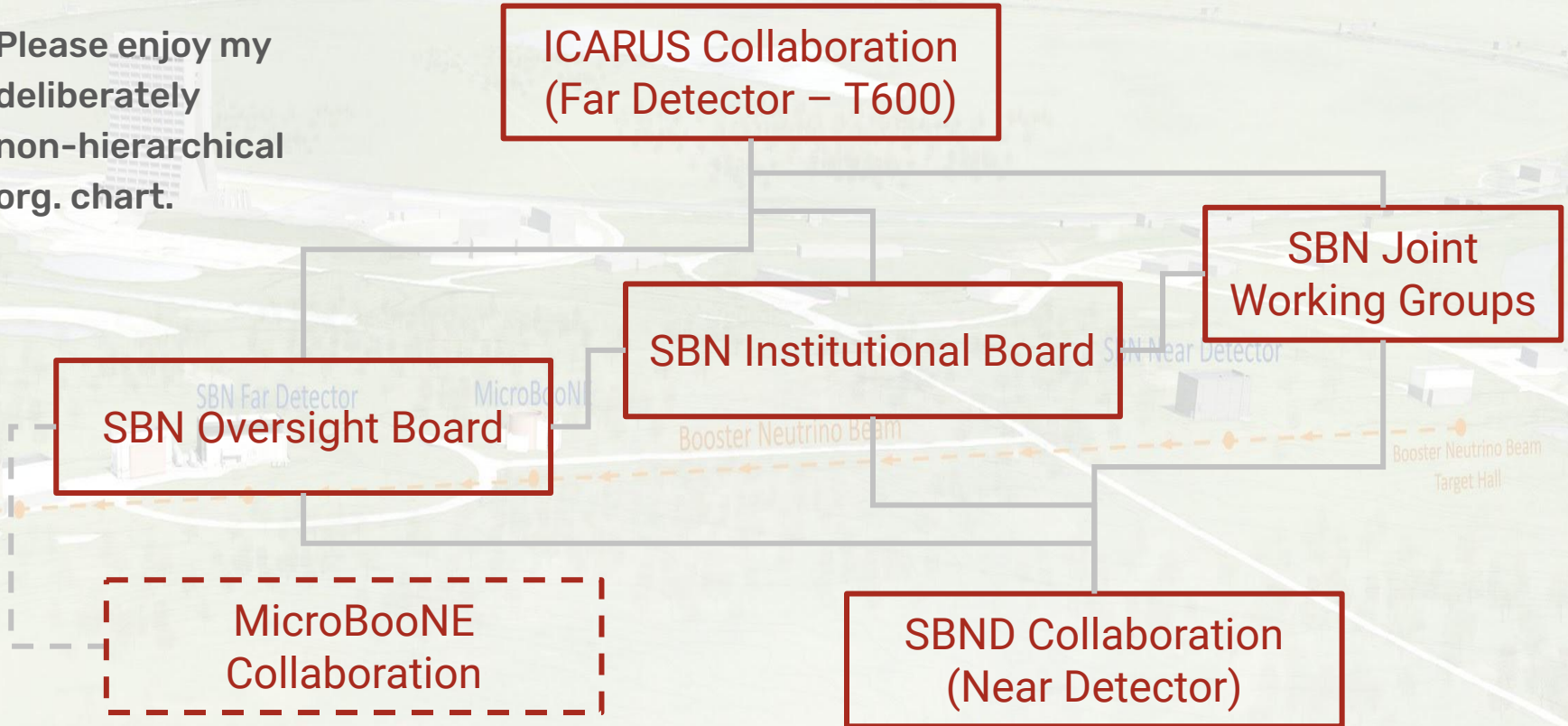
- **SBN Oversight Board**
  - forum for cross-collaboration communication or MoU development on issues relevant to construction, commissioning, operations, data management, and analysis
- **SBN Institutional Board**
  - forum for program-wide communication; develops procedures and policies covering joint aspects of operation, data sharing, data analysis, publications, etc.
- **SBN Joint Working Groups**
  - co-develop many key technical aspects of SBN operations and physics analysis

# SBN Organization: Who

- **SBN Oversight Board**
  - spokespersons of detector collaborations, collaborator representatives for international stakeholders; Steve Brice chairs
- **SBN Institutional Board**
  - one representative per collaborating institution and representatives of other key groups; Kevin McFarland chairs
- **SBN Joint Working Groups**
  - open to all collaborators; many groups
  - e.g., analysis, DAQ/computing, cosmic ray tagger systems, etc.
  - [Separate presentation to this PAC on the SBN Joint Analysis Working Group]

# Structures of the SBN Organization

Please enjoy my  
deliberately  
non-hierarchical  
org. chart.





MicroBooNE  
Collaboration

## and the SBN Organization

MicroBooNE is not currently a participant in the data sharing, analysis, and publication agreement, and its institutions are not represented in the institutional board (except by their separate institutional membership in SBN collaborations).

The SBN organization structures do not preclude the addition of MicroBooNE at a later time if it chooses to enter into SBN structures and agreements.

# Activities of Oversight Board

Meets quarterly. Oversight board receives reports on key construction, commissioning, and operational efforts.

Discussions are mostly focused on SBN interfaces to the Fermilab. Examples:

- Site access for commissioning and construction tasks
- Review of technical and study progress for overburden.

Also regularly reviews progress of the joint working groups.

# Institutional Board By-Laws

Institutional Board is nearly done writing a set of by-laws covering meetings and votes, membership, committees, elections of officers, etc.

Goal is to keep the group as self-organizing. It is not only a resource for managing joint activities, but for the detector collaborations if they wish to bring items to SBN in an inclusive forum.



# Procedures for SBN Results

- When both detectors are operational, the data-sharing agreement foresees development of joint results, in addition to single detector results.
  - Joint working groups are actively preparing the analysis framework for these results.
- The SBN organization also needs detailed rules for carrying out joint “collaboration style” functions:
  - Approving SBN results
  - Shepherding SBN publications and presentations
  - Defining datasets and prioritizing computing resources

# Institutional Board Standing Committees

- This institutional board is ~months away from launching a set of committees to manage these key tasks for joint science:
  - a. Approval of results
  - b. Review and approval of publications
  - c. Assigning and managing speakers for conferences/seminars
  - d. Designating datasets and prioritizing computing resources
- Currently we have rules writing groups, one per standing committee, who are writing down how the committees will function and what policies they will implement.

# Stakeholder Interfaces for Approving Processes of Standing Committees

- Development of rules within SBN IB
- Rank-and-file SBN members from SBND and ICARUS
  - *First round of comments already sought by rules-writing groups.*
- ICARUS and SBND leadership and IB
  - *Will seek approval from ICARUS and SBND IBs*
- FNAL SCD (Datasets and Computing only)

Participatory democracy can be slow. Process launched in late 2020. I expect proposals to be voted on by IB in late summer, with datasets/computing standing committee (“D3C”) perhaps lagging.

# Summary

- **SBN Organization supports the science across the SBN program, from operations to analysis.**
- **Joint working groups continue to serve needs of both detector collaborations.**
- **Processes for joint scientific results are being developed, and should be approved by stakeholders this calendar year.**

# Backup





# Standing Committees, for which rules are being written

**Result Approval Committee (RAC):** This committee will follow a process to decide if a given scientific result should be reviewed by the SBND collaboration, the ICARUS collaboration, or by a joint process. In the case of a joint SBND/ICARUS process for reviewing the result, this committee will need to define that procedure.

**Publication Review Committee (PubComm):** For all SBN publications, this committee will assemble the author list, according to its rules. In the case that a paper describes a scientific result approved by a joint process, this group will also be charged with the review process for the paper, and determine when the paper is ready for submission.

**Speakers Committee (SC):** This committee will collect speaker requests for the SBN experiments. It will first decide if the request should go through a SBND only process, an ICARUS only process, or a joint process. Since so many speaker requests are joint across the SBN program, as a practical matter, the group should consult with the existing SBND and ICARUS speakers committee and collaboration leadership to determine if a single merged speakers committee should be considered.

**Dataset and Computing Coordination Committee (D3C):** The SBN experiments will need to make joint decisions about when datasets are ready for common analysis, and how to prioritize computer resources for those datasets. This group should advise on that function, and should coordinate with SBN collaboration to make joint decisions about datasets and use of computing resources. This committee will also oversee the technical implementation of access to SBN analysis software and to SBN data for all SBN collaborators.

# Rules-writing Group Members

**Result Approval:** Costas Andreopolous , Mark Convery, Bill Louis (chair), Sandro Palestini, Fernanda Psihas, Stephen Dolan

**Publication Review:** Maurizio Bonesini, Dan Cherdack, Albert De Roeck, Elizabeth Worcester (chair), Animesh Chatterjee

**Speakers Committee:** Minerba Betancourt, Sowjanya Gollapinni, Alessandro Menegolli (chair), Jarek Nowak, Francesco Poppi

**Datasets and Computing Coordination:** Wes Ketchum (chair), Mitch Soderberg, Andy Mastbaum, Gianluca Petrillo, Francesco Pietropaolo, Diana Mendez, Mateus Carneiro

# What should be in the “rules”? *Other ideas?*

**A Charge**, a detailed description of the committee’s responsibilities.

**Membership**, a description of how many members will serve on the committee and what conditions there should be the membership, including SBN collaboration affiliation.

**Points of Contact**, when and to whom does the committee report on its activities to the SBN IB or to the appropriate group individual SBN collaborations.

**Description of Processes**. These may include such considerations as:

What follows a joint SBN process and what is handled within the detector collaborations?

What input does the committee require in order to act on approval or a result or publication, or selection of a speaker, or definition of a dataset?

How does the committee organize meetings to review a result, or to run a practice talk?

What input does the committee gather from the members of the SBN organization and how does it gather it? E.g., “no sooner than two weeks after the distribution of an initial technical note describing a joint result to the SBN membership, the RAC will hold an open meeting of the SBN members to hear a presentation on the analysis and gather questions from the members that must be answered before the result can be approved by vote of the SBN members”. Or, e.g., “when the first draft of a joint paper is submitted to the SBN members, the committee will request a list of authors for the papers from each of the SBND and ICARUS institutional boards”.

What documentation does the committee produce as part of its work and how is it distributed to the SBN members?

# Proposed Parts to be done by IB, no rules needed

- Selection/election/terms of committee members. The SBN IB will develop a common plan (IB by-laws) for choosing members of these committees and for terms of service.
- Leadership of the committee. We will ask each committee to select a chair by vote of the committee
- A provision for changing the rules of the committees. The SBN IB will reserve this function for itself (IB by-laws).