

LBNE Biweekly Phone Conference 12/11/2014

Report from the Joint Readiness Assessment Team (LBNE+SCD)

Maxim Potekhin

potekhin@bnl.gov

Brookhaven National Laboratory

Goals of this meeting

(agreed to by SCD and LBNE spokes)

- ▶ The LBNE software coordinators are requested to form the LBNE and FNAL-SCD Joint Assessment of Software/Computing needs for the Long Baseline experimental program.
- ▶ FNAL-SCD and the LBNE collaboration will form a standing team to advise the LBNE spokespeople and FNAL SCD regarding computing plan, software tools, and man power resources needed in the short and long term.
- ▶ The LBNE software team is requested to provide a summary presentation of the computing plan presented during the May 13-15 DOE software/computing review. The summary should be followed by a description of the team and the completed tasks since May.
- ▶ The outcome of the first meeting should be a joint very brief report outlining the needs in bulleted form for the 35 ton, requested by December 25. The brief report should address the process for resolving longer term issues, and place the short term requests in the context of these long term issues.

Participants and Link

- ▶ Oliver Gutsche (SCD lead for the meeting)
- ▶ Tom Junk
- ▶ Michelle Stancari
- ▶ Liz Sexton-Kennedy
- ▶ Maxim Potekhin
- ▶ Steve Timm
- ▶ Brett Viren
- ▶ Adam Lyon
- ▶ James Amundson

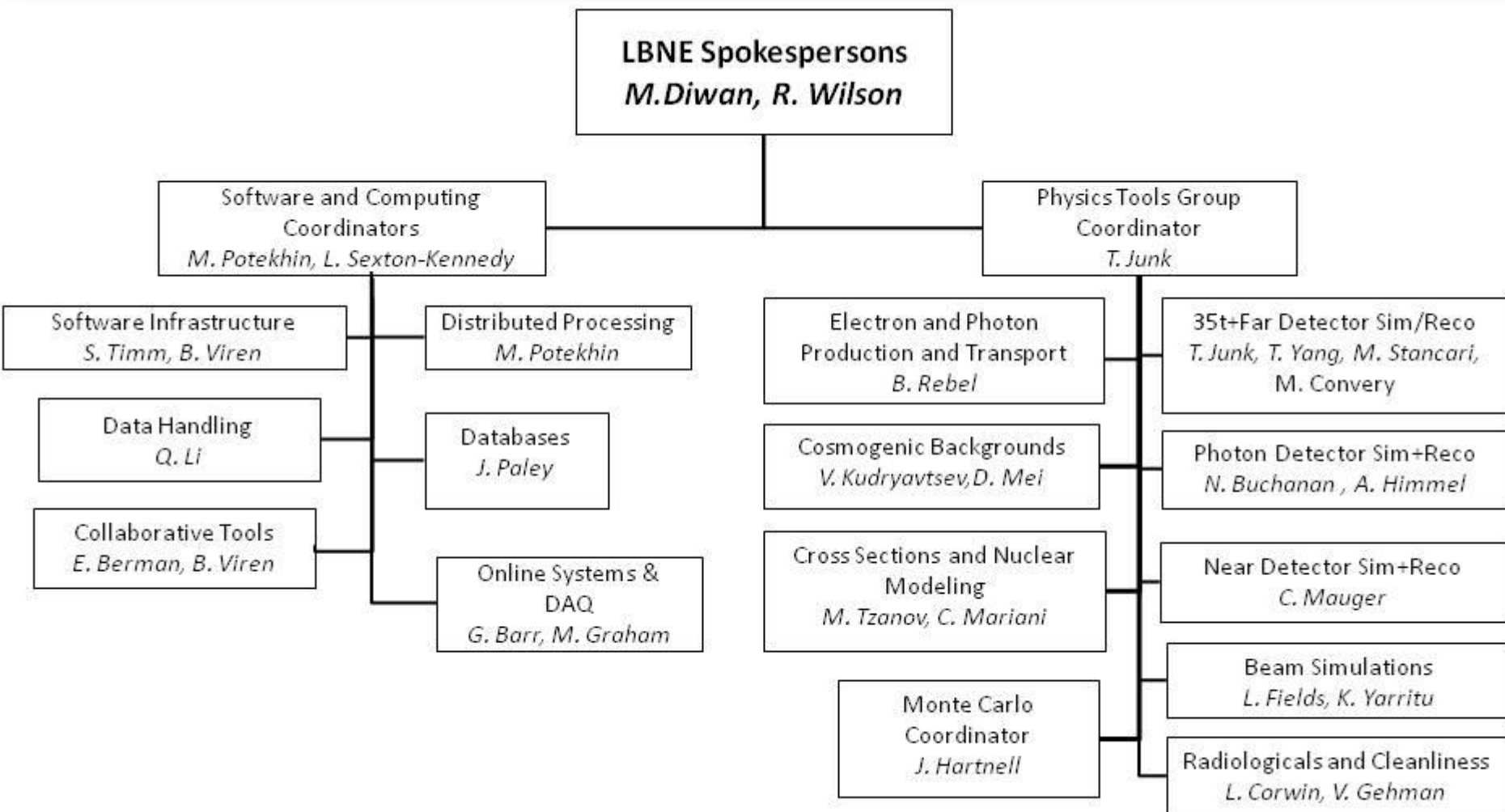
- ▶ Please visit:
<https://indico.fnal.gov/conferenceDisplay.py?confId=9181>
- ▶ Also contains a link to the “white paper” which I believe is a good read.

What was presented (please see the link on the prev. page as well)

- ▶ Interim org chart and structure of the effort
- ▶ Events and Milestones of the past 18 months, documentation.
- ▶ Key S&C areas where progress was made in 2014
 - ▶ Core software infrastructure – progress made with improved software build procedures
 - ▶ Improved system for geometry description
 - ▶ Software Release Management
 - ▶ Distributed computing (CVMFS+Grid)
 - ▶ Initial quantitative parameters for the Computing Model
- ▶ Broad Overview of the Physics Tools, to inform SCD of the many areas where work is being done – Tom.
- ▶ 35t readiness (physics tools) - Michelle.
- ▶ “White Paper” on software build tools – Brett.



Software and Computing/ Physics Tools (Fall'14)



Summary

▶ Michelle:

- ▶ Keeping ties to the IF community is vital for LBNE since we don't have postdocs and in general are greatly constrained in terms of manpower. For same reason we need to assure development of LArSoft is managed in a way that optimizes reusability and compatibility and allows leveraging of effort in and by the community. According to Michelle, SCD can help organize that
- ▶ Other technical issues down to the level of data structures in LArSoft and Art.

▶ Brett presented the “White Paper” on software build and strategy for acceptance of the new procedures into upstream code base.

▶ Maxim: we need SCD support in facilitating use of the improved build procedures in and for LBNE

- ▶ This was important even before reorganization, due to a potentially large and geographically dispersed organization – we want a reasonable build environment for developers on multiple sites. More important now due to more international representation in the project.

▶ Oliver will prepare a report to be delivered to the SCD leadership and it will be made available to us before this happens.

▶ The issue of the 35t DB was brought up and we don't have anything in terms of documentation and/or design at this point. Confirmed during today's DAQ meeting. Need to talk to Giles and Alan. Jon indicated 10 days ago that DAQ/online people would provide information for him, not sure if this is happening.

SCD&LBNE

- ▶ We need SCD support in facilitating use of the improved build procedures in and for LBNE
 - ▶ This was important even before reorganization, due to a potentially large and geographically dispersed organization – we want a reasonable build environment for developers on multiple sites. More important now due to more international representation in the project.
- ▶ Metadata (both conceptually and applied to technologies outside of SAM) is a difficult subject and if there is a source of expertise in SCD (a data scientist) that would be helpful.
- ▶ There are mostly technical issues e.g. design of data structures in art and larsoft where SCD could provide crucial assistance.