

690835-MUSE-H2020-MSCA-RISE-2015

Minutes of the MUSE Scientific Board (SB), Monday, February, 15th, 2016 - 3:00 pm (GMT)

Attendees: D. Bremmer (Skype), D. Cauz (Skype), R. Chislett (Skype), S. Donati (chair, at FNAL), S. Giovannella (Skype), M. Lancaster (at FNAL), A. Lusiani (Skype), M. Martini (at FNAL), S. Miscetti (at FNAL), F. Spinella (at FNAL), G. Tassielli (at FNAL).

Agenda:

1. Introduction to the SB duties
2. SB composition
3. Analysis of the 7 Work Packages (WPs)
4. Calendar and organisation of future SB meetings, towards Mid Term Review (early 2017)

S. Donati gives a general overview of the Scientific Board duties, composition, and organisation. This is followed by a brief discussion among participants.

1. Scientific Board duties

The duties of the SB are to coordinate the Muse scientific activities, organised in 7 WPs, and to monitor the progress of the Muse scientific programme, by checking the deliverables and the milestones. This includes planning, organising, and supervising the researchers' secondments, collecting reports from the seconded personnel, and submitting revisions of the secondments plan to the MB for approval. The SB has to produce periodic written reports every 6 months relative to the Muse activities and status of secondments, deliverables and milestones. In case of problems, the SB has to develop mitigation plans. The SB meets every two months, and more frequently, if necessary.

2. Scientific Board composition

The SB is composed of the WP conveners and at least one Management Board (MB) member acting as chair of the SB. This is the list of the WP conveners:

1. WP1 "g-2 detectors": M. Lancaster (UCL), T. Bowcock (LIV);

2. WP2 "Mu2e detectors": S. Miscetti (INFN), M. Martini (INFN);
3. WP3 "Calibration": C. Ferrari (INFN), D. Cauz (INFN);
4. WP4 "Software tools": G. Tassielli (INFN), R. Chislett (UCL);
5. WP5 "Dissemination and Outreach": A. Lusiani (INFN), D. Glenzinski (FNAL);
6. WP6 "Transfer of Knowledge": F. Fiedler (on parental leave, temporarily replaced by D. Bremmer, both at HZDR), F. Spinella (INFN);
7. WP7 "Management": S. Giovannella (chair of the MB), S. Donati (chair of the SB).

To improve the efficiency of their work, the WP conveners may appoint single task leaders.

3. MUSE Work Packages

This is a brief description of the 7 WPs objectives.

1. WP1 is related to all the activities necessary to deliver the g-2 detectors involved in this project: the straw-tracking system and associated readout and DAQ, the interface of the output signal from the laser monitoring detectors to the Wave Form Digitizers boards of the calorimeter, and the SiPM Bias Voltage Supply.
2. WP2 is related to all the activities necessary to deliver the Mu2e detectors involved in this project: the calorimeter and the HPGe monitor. The MUSE project will cover a crucial period since the final detector designs must be finalized by the end of 2016. For the calorimeter, the activities span the characterization of detector components through to construction and the installation of the first disk at the end of 2019. For the HPGe detector, the project will include the design of the detector, its shielding, remote handling, simulation, cooling and the irradiation tests and will conclude with its installation in the Mu2e beamline at the end of 2019.
3. WP3 is related to the basic principles and the technology of the calibration system are common to all Mu2e and g-2 detectors included in this project. The related tasks range from design, construction, installation and commissioning of sophisticated laser systems, both for g-2

and Mu2e calorimeters, to the development of calibration techniques. The Mu2e laser system will largely benefit from the experience and knowledge acquired by the g-2 group in the development of the light distribution and monitoring systems. The Mu2e experiment will inherit much of the calibration and alignment techniques developed for the g-2 tracker.

4. WP4 is related the provision of the software tools needed for the simulation of the detectors, data reconstruction and data analysis. These tools will be used in software calibrations and to develop algorithms for gain correction and for identifying pileup and lost muons in g-2 data, as well as to reconstruct clusters and tracks in Mu2e. Online and offline frameworks are common for g-2 and Mu2e experiments, as well as several calibration tools.
5. WP5 is related to the communication from the research community to the general public will be maximized by organizing all the related activities in a dedicated WP: this will also include the public branch of the MUSE web site. A special effort will be made to involve university students in the outreach activities. MUSE Workshop days, organized in conjunction with General Meetings, will be the opportunity for all participants to share their expertise in the outreach programmes.
6. WP6 has the objective to maximize knowledge transfer within the network to increase the quality of the research and train personnel in related research fields both within and outside academia, i.e. the SMEs. The transfer of expertise on silicon photosensors to medical applications will form part of this WP.
7. WP7 has the objective to provide an efficient and accountable running of the project. It will monitor the scientific activities and quickly react in the event of unexpected difficulties and mitigate the risk of failure. The management of secondments requires a clear and well defined procedure to react in the event of modifications to any work plans. Ensuring knowledge sharing among participants, the visibility of the project and equal opportunity for all participants are also important aspects of this WP.

4. Future Scientific Board meetings

The next SB meetings are scheduled for April 2016, June 2016, August 2016, October 2016, and December 2016. The dates will be decided after internal consultation.

The meeting is closed at 5:30 pm