Minutes of the
AMBER Collaboration Board Meeting via ZOOM
on January 11th, 2022, 15:00 Geneva time

Attendance: C. Azevedo, B. Badelek, A. Bressan, M. Chiosso, S. Dasgupta, O. Denisov, S. Donskov, A. Dziuba, M. Finger, H. Fischer, J. Friedrich, A. Guskov, T. Iwata, E. Kabuß, B. Ketzer, W. Lorenzon, V. Lyubovitskij, H. Marukyan, J. Novy, D. Panzieri, C. Quintans, V. Saleev, A. Sandacz

O. Kiselev, S. Levorato, G. Mallot, D. Neyret

Guests: A. Lissajoux, W.-D. Nowak

Apologies: J. Bernauer, R. Kurjata, J. Lichtenstadt, G. Nigmatkulow

Absent: J. Berenguer, S. Gerassimov, M. Grosse-Perdekamp, D. Keller, M.X. Liu, N. Masi, T. Matsuda, B. Seitz, H. Suzuki, P.Zuccon

There are two new CB members: Josef Novy replaces Miroslav Virius for the Czech technical university, Börn Seitz replaces Ralf Kaiser for the Glasgow university. Argonne is no longer member of AMBER, so Paul Reimer left the AMBER CB.

Thanks a lot to Miroslav, Paul and Ralf and welcome to Björn and Josef.

As a guest we had Anne Lissajoux in the meeting, who is the CERN AMBER secretary. After a short introduction by Oleg, Anne explained her work for AMBER. She repeated the request for information on team leaders and deputy team leaders.

The agenda was:

1. Welcome, Attendance and Apologies
2. Approval of Agenda
3. Approval of Minutes:
   CB meeting on November 23, 2021
4. Communications by SPs
5. Communications by CB chair
6. Status of Phase 2 proposal
7. AMBER member data base
8. AOB

2. Approval of Agenda
The items on the agenda were approved without changes.

As we had Anne in the meeting we decided to change the order of the agenda and start with the report on the AMBER member base.

3. Approval of Minutes
The draft minutes for the CB meeting on Novmber 23 were distributed on Januar 6.
The sentence "The decision by the INFN directorate is expected soon" will be replaced by "As a result INFN will support AMBER."
No further comment were received. They were approved with the indicated change.

4. Communications by SPs (given by O. Denisov)
a. Beam Schedule for 2022 north area:
start of beam 25.4., end of beam 14.11, 203 days.

b. Objectives for 2022 AMBER data taking:
$\bar{p}$ cross section (Xsec) and proton radius measurement (PRM) tests

- **Xsec:** short taking as close as possible to the final experimental configuration for beam line, target and spectrometer
- **PRM:** test of new DAQ with as many tracking detectors as possible,
  test of kink trigger concept
  aim: 2-3 UT stations partially equipped, to be claarified till April
- **TPC:** barrel should arrive in autumn, gas system still to be clarified

Detailed specification for both tests still have to be provided by the physics groups.

c. Beam requests to SPS coordinator:
PRM: 14d parasitically, 15d main user
Xsec: 10d main user
Changeover: SIDIS $\rightarrow$ Xsec: 13d, Xsec $\rightarrow$ PRM: 24d
There is still room for optimisation, this depends critically on the PRM test setup configuration.

d. Long term planning beyond 2022:
DAQ group proposes to start in 2023 with Xsec and then go to PRM. This puts quite some pressure on the 2022 Xsec test.

e. Transfer of equiment from COMPASS to AMBER:
A list of equipments was prepared by Stefano, it has to be discussed by the physics groups. Not wanted pieces have to be disposed by the owner. For the transfer of equipment belonging to groups, which are not in AMBER, an agreement has to be prepared.

f. 2022 deadlines for applications were given where possible. There is a call for sommer students projects.
Please inform AMBER if you plan any kind of application!

g. Manpower support: A list of the planned resources in the AMBER budget for support of manpower was given.

h. Discussion: In the discussion the CB members expressed their strong opinion that the change-over times for the test measurements should be minimised. It was mentioned

that there is still time to finalize the PRM setup as it seems unlikely that the SPSC will take a final decision on the beam time sharing in January. It was also noted that the order of the test measurements also depends on the requested MuonE and NA64μ test measurements.

5. Communications from CB chair

a. DY physics coordinator

Both DY physics coordinators, Marcia Quaresma and Paul Reimer, left AMBER.
Thanks a lot to Marica and Paul!
We have as temporary solution **Vincent Andrieux** as DY physics coordinator for a few month. The CB members welcomed this solution unanimously.

b. Status of MoU

The corrections and proposals from Helge Meinhard are being discussed and implemented. Special care will be taken for an update of the bylaws. A first meeting with the MoU and bylaws drafting groups took place. The discussion has to be continued. The proposed changes will be discussed in the next CB meeting.

c. IWHSS22 workshop

- COMPASS proposed the date of Jun 21-23 for an IWHSS22 workshop at CERN in person. This is the date of the planned June AMBER collaboration meeting.
- To reduce travelling COMPASS moved their May CM meeting to Mon Jun 20.
- COMPASS proposed to have a joint IWHSS22 workshop with AMBER and a move of the AMBER CM meeting to Fri 24.
- The COMPASS CB meeting will be remote on Jun 17. Also AMBER could then do a remote CB meeting in the week before or after the workshop.

After an exchange of opinions the CB members agreed to the proposal. It was pointed out that AMBER and COMPASS should organise the workshop on equal footing.
The decision on the June CB meeting will be taken on the March CB meeting.

d. Dates of 2022 meetings

- Collaboration meeting: 9./11.3.22, CB: 10.3.22 (remote)
- Collaboration meeting: 24.6.22, CB: to be decided
- two more tentative dates: week 38 and week 49

e. Extra CB meeting in February

- Wed 9.2.22 at 15:00 (Geneva time):
  to discuss the outcome of the SPSC meeting and any other urgent business

f. AMBER logo:

Three logo drafts are still being discussed, including two provided by Melissa Perrey. We will ask for some further changes next week. The updated logo should be ready for the next CB meeting to decide whether we go for a vote of the collaboration.

6. Status of Phase 2 Proposal

The report was given by Wolf-Dieter Nowak for the AMBER future working group.

- First he summarized the physics goals for PHASE 2 as they emerged from the series of EHM workshops.
- There were unpleasant news from the RF separated beam workshop in autumn. The achievable kaon intensity for the DY measurement with the RF separated beam is considerably lower than assumed in the LoI. More work is needed from the beam department and the DY group to compare the achievable statistics with the conventional hadron beam and the RF separated beam, when both are being optimised for the kaon DY measurement.
- Depending on the outcome, the kaon DY measurement might have to be done in parallel/or as extension to the approved pion DY measurement in Phase 1. In such a case a document for the June SPSC meeting, where AMBER will report, should be prepared.
- For the other kaon physics goals, which would rely on the RF separated beam, working groups to start preparing the proposal have to be formed and work has to start a.s.a.p. with the aim of finishing the Phase 2 proposal in the end of 2022.

During the lively discussion Catarina reported that the DY group is in close contact with the CERN beam and radio protection groups and they are looking in detail into all the mentioned problems of optimisation.
There was also concern on the performance of the CEDARs expressed. Analysis work is ongoing and discussion with the beam group to improve the beam divergence at the CEDAR location is ongoing.
Quite some hope rests on Vincent to give a new push as DY physics coordinator to all the work needed. More people are welcome to join the effort.
The AMBER future group should resume work for the Phase 2 proposal and help to form the different working groups.
Regular reports should be given on the CB meetings.

7. AMBER member data base
The CB meeting started with this item as mentioned above.
Bernhard Ketzer reported on the investigations done by Paolo Zuccon, Andrea Bressan and himself.
A list of requirements was collected and they started to look into solutions from other CERN experiments. In the talk the GLANCE system, which is used by ATLAS, ALICE and LHCb, was introduced. GLANCE is a powerful tool that can be used for many applications among them a member data base. Bernhard showed online some examles using the ALICE member data base.
A day before the meeting a remote meeting with the GLANCE developers took place. They offered to give us an empty version of the ALICE membership part to try it out. If we adopt the use of GLANCE it would rely on the computing resources from CERN and we would need a responsible from the AMBER side.
In the discussion it was stated that this system looks quite promising and seems to be what we need. There were questions to be clarified whether the system can be connected with mailing lists and how special characters in names are treated.
The CB members unanimously voted for accepting the offer and make a try with GLANCE.
We have to find an AMBER responsible for GLANCE in the next weeks.

8. AOB
There was no AOB.

End of meeting: 18:50