

Minutes of the EB meeting 2019-03 on 19 March 2019

Time/place of the meeting: 19 March 2019, 10h15 room A111 at the University of Bern, ExWi building, Bern

Participants: Günther Dissertori (GD), Gino Isidori (GI), Tatsuya Nakada (TN, chair), Michele Weber (MW) and Angela Benelli (AB, administrator).

1. Agenda

GD would like to bring up a discussion item under A.O.B, as a report about the Council meeting at CERN on March 11-14, 2019 and TN would like to report about the European Strategy meeting.

2. Apologies, none.

A. Administrative items

3. Minutes of the last meeting (2019-02)

The minutes of the EB 2019-02 are approved after some modifications. AB will publish them on the CHIPP website.

4. List of Actions

2019-02–4 CTA strategy support from Swiss Institutes: A meeting between the CHIPP members interested in CTA has been fixed for the 4th April. Pepe lacobucci and Teresa Montaruli from UGe, Thomas Gehrmann and Florencia Canelli from UZH, Rainer Wallny and Adrian Biland from ETHZ will be present at the Skype meeting. By the end of April SERI would like to have some inputs from this discussion between the Swiss groups. TN had a discussion with Ulrich Straumann (US) that confirmed to him that as soon as the R&D for CTA will finish at the University of Zurich, the task/production will be passed to the Industries and the UZH role will be uniquely to check the quality of the hardware and that it's delivered in time. US said that the UZH would continue its involvement with CTA on the scientific part at the level of PhD students for a limited period. GI reminds the EB that the Physics Institute of UZH did ask for a professor position in astroparticle physics, but it is not clear if the position will be granted. If the new professor will be eventually interested to work in CTA with some percentage this could be a solution. For such a case, there could be a continuity provided by Florencia Canelli from now to the start of the new professor's mandate. The timescale of this position is unknown.

Michele Weber asks to investigate what is the interest of the Swiss Institutes in the CTA physics, in using and in analysing the data coming from CTA.

2019-02-4 SERI Roadmap & Neutrino: MW reports on the RRB meeting at FERMILAB, there is an effort from SERI to find a common agreement between CERN (represented by Marzio Nessi) and the Swiss Neutrino Community (represented by Michele Weber) on how to invest the 2.3 MCHF Swiss contribution into the DUNE LBNF. The meeting should be held on 5th April. Representatives from industry will be present at the meeting.

5. Dates of next 2019 EB meetings:

- 7 May 13h15 SCNAT, Bern
- 11 June 10h15 SCNAT, Bern

B. Items for discussion

6. Preparation Plenary 2019 1-3 July. indico

TN reports about the advancements of the Plenary meeting organization: Jorgen D'Hondt accepted to participate and to summarize the Open Symposium meeting in Granada and the status of the Strategy process in general.

Timetable & some plenary talk ideas:

- Theory talk on high energy physics
 - o ATLAS+CMS: Physics results 30min
 - o ATLAS+CMS: Plan for the Phase2 Upgrades 30min
 - o LHCb physics results 30min
- CHART
- PSI
- precision measurements 40min
- o upgrades 20min
- Neutrino physics overview (US and Japan)
- Astroparticle
 - gravitational waves 30min
 - Underground experiments (Laura Baudis & Andre Rubbia) 20min+20min
 - o CTA (?) 20min
- Theory
 - > Flavor
 - Beyond the standard model: theoretical considerations (Riccardo Rattazzi)
- European Strategy Symposium
 - Jorgen d'Hondt

The EB feels that it would be a good idea to have a podium discussion about the future of particle physics inviting also outreach people.

AB→ print and prepare badges for the participants.

AB→ to invite SERI, SCNAT, SNSF representatives & Benedikt Vogel.

7. SCNAT funding requests for 2020

- CHIPP Zuoz School (10000 CHF from SCNAT + 2000 CHIPP)
- 'Dialog' request for the outreach activities (Benedikt Vogel activities)
- IPPOG membership (3000 euros)
- Other activities? Swiss Roadmap meeting (one-night meeting, starts before lunch 1_{st} day
 and stops at 16h on the 2_{nd} day.). AB should propose some places that are easy to be
 reached by train, suitable for 40-50 people in early June 2020 (after the ESPP decisions) or
 in September 2020.

AB → Propose some venues & prevision of expenses

8. CHIPP Election Nominations

IPPOG Swiss representative: Katharina Müller (UZH) accepted to continue from August 2019 to August 2021.

CSR (Commission for Space Research) Observer: Xin Wu (Geneva) accepted to continue from January 2020 to January 2022.

APPEC Swiss representative: Teresa Montaruli is the APPEC Chair since January 2019; for this reason, she would like to be replaced as Swiss representative. We need nominations for this position. SNSF needs to be contacted and involved in the selection.

The CHIPP Executive Board (EB) has currently the following members:

- o Tatsuya Nakada (Chair) (until Dec 2019)
- o Gino Isidori (until Dec 2020)
- o Günther Dissertori (until Dec 2019)
- Michele Weber (until Dec 2020)

Gunther Dissertori, Tatsuya Nakada need to be replaced → Nominations to be requested

Plenary-ECFA representative: Domenico Della Volpe (U. Geneva) accepted to continue from January 2020 to December 2022. This is an election to be held by the CHIPP Plenary under the recommendation of the Board.

AB→ Send email to the Board for two EB candidates

9. Outreach funding request AGORA

GD reports about the status of the request of the AGORA grant from the SNSF. At the moment the request is in the hands of SNSF and hopefully by mid- or end-of May we should have an answer.

10. Roadmap update Already discussed in Item 7.

C. Items for information

11. CHIPP Prize updates

GI reports about the CHIPP Prize 2019, applications are slowly arriving.

12. SPS/ÖPG joint annual meeting, Zurich

The SPS/ÖPG joint annual meeting will be held at the University of Zurich this year, the 26-30 August 2019. A. Schopper is the President of the Particle Physics and Astrophysics section (TASK). AB will participate in the organization of the event if it will be necessary and in the timetable planning. <u>Indico Web page</u>.

AB→ Contact Andreas Schopper about the organization of the meeting.

13. Status of recent & future meetings

1-3 July 2019

Board meeting & Plenary meeting 2019

26-30 August 2019

SPS/ÖPG Annual meeting 2019

14. AOB

Report about the Council meeting of March 11-14, 2019 from Günther Dissertori (cf. his report from the March Council Week that has been distributed)

F. Gianotti reported in detail on the activities at the FALC/ICFA/LCB Meeting and surrounding events held on the 6-8 March 2018 in Tokyo. It is clear that the lack of a conclusive statement of intent by the Japanese government on the hosting the ILC in Japan will not make it easier to arrive at a formulation of the European strategy. F. Gianotti also discussed the parameters (including cost estimates and technically limited schedules) for the collider projects currently under study at CERN, namely CLIC and FCC.

GD reports about the SPC meeting: C. Vallée summarized the Physics Beyond Collider activities that explore the opportunities offered by the CERN accelerator complex to address some of today's outstanding questions in particle physics through experiments complementary to high-energy colliders and other initiatives in the world. M. Nessi reported on the single- and dual-phase ProtoDUNE detectors which have achieved excellent progress since the initiation of the project in 2016. Upon questions raised by the SPC, M. Nessi explained the advantages/disadvantages of the dual-phase and the single-phase technologies.

Report about the First European Strategy Group (ESG) Meeting of March 15, 2019 from Tatsuya Nakada

TN reports about the meeting held at CERN on 15 March 2019. The Strategy Secretariat initiated five working groups addressing some topics beyond the main scientific themes:

- Social and career aspects for the next generation
- o Organizational structure for European participation in global projects
- o Relations with external bodies and fields of physics
- Knowledge and technology transfer
- Outreach, education and communication
- Sustainability and environmental impact

There was a discussion about the Outreach Group's scope, the group would like to address both the method of outreach and the values of the basic science. This was generally accepted; in particular the group could cover the cultural and philosophical value of basic science.

Halina Abramowicz, the Chair of the Strategy Secretariat, asked TN for this meeting to study and then report about the relations with other organisations that are outside particle physics like astroparticle. At the moment there is an astroparticle-theory centre at CERN, some astroparticle-R&D activities and CERN provides logistic, technological and infrastructure support for some recognised astroparticle experiments. One important issue is if CERN should participate also in the scientific aspects of the astroparticle experiments, i.e. being part of the collaboration of some experiments. Another organisation to be looked at is ESFRI, and other EU organisations related to science research.

In the past, the light sources in the area of synchrotron technologies were discussed in the "Knowledge and technology transfer" group, now this technology comes back contributing to particle physics. Similarly, for computing and plasma physics that gives inputs in the accelerator technology, there are bi-directional interactions. For this reason, all these topics will be considered now in the "Relations with external bodies and fields of physics" group.

Siegfried Bethke presented his analysis on the Country Roadmaps submitted as input for the European Strategy discussion. It was reported that there is a general consensus on the e+e- collider as next Higgs factory machine and generally countries supported linear colliders and only few countries clearly supported FCC. However, the following discussion shows that more careful analysis is needed.