

Minutes of Board meeting 2016-02 on 22 August 2016

Time of the meeting: Monday, 22 August 2016 from 14:00 to 18:00
Place of the meeting: Università della Svizzera Italiana (USI), Via Giuseppe Buffi 13, 6904 Lugano

The Chair opens the meeting at 14:05 ([→ slides of the Chair](#))

1. Welcome and agenda ([→ document](#))

The Chair welcomes the Board members, Honorary Board members and the Observers at the Board. The proposed agenda is approved without changes.

ADMINISTRATIVE ITEMS

2. Apologies and Proxy votes

Board members with voting rights (as of 21 August 2016): 67

Present: Beck (2nd part), Colangelo, Dissertori, Golling, Grab, Hildebrandt, Iacobucci, Kirch, Kotlinski, Mermoud, Montaruli, Nakada (Chair), Rivkin, Rubbia, Schneider, Serra, Signer, Wallny, Weber, Wu

Other participants: Amsler (Hon.), Bourquin (Hon.), Reymond (Obs. SERI), Schopper (Obs. SPS), Türler (Admin.)

The Chair informs about the apologies received and about the proxy votes announced before the meeting¹.

Quorum: 23 votes (= 1/3 of the Board members; Art. 24.1 Statutes); Votes present: 20 + 6 proxies = 26

→ The quorum is reached.

3. Minutes of the last meeting (2016-01 [26 February 2016]) ([→ document](#))

The Chair asks for comments concerning these minutes. As there are none, he invites the Board to approve them.

The Board unanimously approves the minutes (with thanks to the minute writer).

DECISION ITEMS

4. Election of two Executive Board members for 2017–2018 ([→ document](#))

The Chair introduces the topic by reminding the current composition of the CHIPP Executive Board (EB).

Teresa Montaruli finishes her 2nd term at the end of the year and wishes to step down afterwards, while Adrian Signer is ready to serve for a 2nd term as EB member. The call for nominations resulted in three new candidates among which one was not standing for election. The two others, Michele Weber (Uni. BE) and Xin Wu (Uni. GE) are ready to serve and are asked to leave the room. The Chair opens the discussion. The importance of a fair geographic distribution in the EB, but also on CHIPP pillars is mentioned. It is noted that both candidates are well involved in ATLAS. Weber is then asked to come back in the room to give a short oral statement. He notes that he is following CHIPP since he is a PhD student. He sees CHIPP as the right tool to represent Swiss particle physicists at federal level. This motivates his support of the association. He will bring to the EB his good understanding of the funding agencies and his expertise on neutrinos, dark matter and also ATLAS. He will be fully committed, if elected and sees not many conflicts of interest. Wu is then also asked to give a short statement. He mentions his work on collider physics (in particular the hardware trigger on ATLAS) and more recently his involvement in astro-particle physics from space (the DAMPE, HERD, PANGU missions in collaboration with China). His motivation to join the EB comes from the

¹ Proxies: Colangelo (for *Ereditato*), Grab (for *Biland*), Hildebrandt (for *Ritt*), Iacobucci (for *Pohl*), Montaruli (for *Schumann*), Serra (for *Baudis*). Apologies: Bay, Grazzini, Isidori, Maillard (Obs. SNSF), Pozzorini, Sfyrla, Straumann.

very important role played by CHIPP to make particle physics coherent in Switzerland. He is used to make priorities and thus confident to find enough time to participate actively despite many different commitments. In absence of the two candidates, the Chair notes the slightly different scope with Wu being more oriented towards space missions and Weber more on neutrinos. He proceeds with the vote. 23 ballots are distributed. There are 13 votes for Weber and 10 votes for Wu, and no abstention.

In absence of the two candidates, the Board – in secret vote – elects Michele Weber for a 1st term as CHIPP Vice-Chair and member of the EB from Jan. 2017 to Dec. 2018.

The two candidates are welcomed back with applause. The Chair announces the result of the ballot, is sorry for Wu and thanks also Montaruli for her work in the EB over the past years. It is then time for Signer to go out of the room. After a few positive comments on Signer's work in the EB and in absence of a request for a secret vote, the Chair calls for election.

In absence of the candidate, the Board – in open vote and with unanimity – re-elects Adrian Signer for a 2nd term as CHIPP Vice-Chair and member of the EB from Jan. 2017 to Dec. 2018.

Signer is welcomed back in the room with applause.

5. Nomination for election of a Swiss Plenary-ECFA representative ([→ document](#))

The Chair introduces the topic by reminding that the election of the Swiss representatives in the European Committee for Future Accelerators (ECFA) belongs to the CHIPP Plenary, based on a recommendation by the Board. He then presents the current Swiss representatives in ECFA and states that Sigve Haug (Uni. BE) is finishing his 1st term at the end of the year, but is not standing for re-election because his current position is not secured beyond 2016. The call for nominations among the CHIPP Plenary Members resulted in three new candidates, but only one of them, Domenico della Volpe (Uni. GE) is ready to serve and stands for election. His CV was distributed as part of the document distributed to the Board. As nobody asks for a secret vote, the Chair proceeds with the recommendation.

The Board in open vote and unanimously recommends to the Plenary the election of Domenico della Volpe for a 1st three-year term (Jan. 2017 – Dec. 2019) as Plenary ECFA representative.

6. Nomination for re-election of the Swiss ACCU representative ([→ document](#))

The Chair reminds that the election of the Swiss representative in the Advisory Committee of CERN Users (ACCU) belongs to the CHIPP Plenary, based on a recommendation by the Board. Michael Dittmar (ETHZ) is finishing his 1st two-year term in December 2016 and is ready to serve for a 2nd term until December 2018. In absence of comments, the Chair proceeds with the recommendation vote.

The Board in open vote and unanimously recommends to the Plenary the re-election of Michael Dittmar for a 2nd two-year term (Jan. 2017 – Dec. 2018) as ACCU representative.

7. Nominations for admission of new honorary members ([→ document](#))

The Chair reminds about honorary membership as described in the Statutes. The admission of Honorary Members belongs to the CHIPP Plenary, based on a recommendation by the Board. He reminds that there are two types of membership: for the Board or only for the Plenary. He then informs about the two requests received this year for Honorary Board Membership by Thierry Courvoisier (Uni. GE), and by Felicitas Pauss (ETHZ). In absence of comments, the Chair proceeds with the vote.

The Board, in open vote and unanimously,

- confirms that the two applicants fulfil the requirements for being granted the status of Honorary Board Members by the end of 2016 according to the Statutes;
- submits to the Plenary the proposals of Honorary Board Membership by the end of 2016 of Thierry Courvoisier and Felicitas Pauss, thereby recommending their admission in this category.

DISCUSSION ITEMS

8. FLARE funding requests ([→ document](#)) ([→ slides](#))

The Chair informs the Board about the procedure for the forthcoming FLARE request. The next deadline is on 15 November 2016 for FLARE funding proposals for either 2017–2018 (2 years) or 2017–2020 (4 years). A second call will be issued in 2018 for the period 2019–2020. The evaluation will be done by an international panel following a presentation by the applicants at a meeting on 19–20 January 2017. The CHIPP Chair shall communicate to the FLARE evaluation panel at this meeting the long-term funding priorities of our community. The LHC Maintenance & Operation (M&O) and Tier-2 computing requests benefit from a specific funding arrangement with shortened research plan. Olivier Schneider answers André Rubbia's question on the composition of the FLARE panel by stating that it includes international experts with no conflict of interest. The Chair expresses the need to coordinate between PIs and the EB to know in advance who is submitting what in order to get a coherent picture. Giuseppe Iacobucci wonders on the role of a White Paper (WP) and whether this could be sent to the panel members. He suggests producing a WP on Pillar 1 in time for this panel discussion. Rainer Wallny agrees that the production of a WP is desired, but that this is probably not feasible in the given timescale. He notes that after SWHEPPS, the idea was to do quickly a short summary and tackle later the actual WP. Iacobucci proposes to have at least some WP executive summary (of the order of 10 pages, including funding needs) ready for January. Klaus Kirch supports the idea to prepare a WP on Pillar 1. The Chair then reminds that in the past we defined for the LA FLARE meeting Priorities 1, 2 and 3. He notes that this sequence was not too clear and it will maybe be better now to have a more thorough discussion in front of the panel. Looking at the foreseen numbers in the distributed FLARE table, he notes that Priority 1 and 2 projects basically fill all of the attributed money, leaving nothing for anything new. In Pillar 1, the long-term projections show that the situation is not improving in 2021–2024 with ATLAS and CMS leaving no money for any future project on low-energy physics, e.g. Mu3e or MEG. The good news is that the lack of funding is “only” at the 20–30% level, when one takes as a baseline that about 20% goes to astronomy projects. Indeed, the updated CHIPP Table from ATLAS received yesterday shows a reduction of the investment costs². Iacobucci explains that this reduction is related to the financial crisis in the canton of Geneva, which cannot support the Phase II upgrade. The Chair notes that if CTA would be fully funded outside of FLARE, this would help a lot. Xavier Reymond reports that there are on-going discussions on the special funding of CTA and that the situation will become clearer in the coming weeks. He clarifies for Wallny that this is indeed a direct contribution of Switzerland to allow Swiss participation in CTA, but hardware can also be funded with this budget line. He adds that other big infrastructures that could potentially be directly funded in the future are SKA and LBNF. Olivier Schneider wonders what fraction of the pot will be distributed in the first two years. In other terms, whether it is better to submit 2- or 4-year proposals. Wallny thinks that it is better to ask for two years at a time to allow flexibility and being able to react at the call of 2018. For the M&O request, the Chair clarified with Tristan Maillard that small adjustments could be done from year-to-year and thus that a four-year proposal could be fine. Günther Dissertori notes, however, that for the Tier-2 Computing request, the funding might change more from year to year and that a two-year proposal would probably be better. The Chair concludes the discussion stressing the need to re-discuss and agree on a set of priorities to be presented in January at the FLARE panel.

The second part of the discussion starts with a presentation by André Rubbia on the Swiss participation in future long-baseline neutrino experiments. He notes that the neutrino white paper has a long-term priority on the long baseline programme. WA 105 and the SBN are preparations for the long baseline. The success story started in 2006 with a coherent Swiss contribution to T2K. Rubbia presents the main results of T2K with no hint for CPT violation, but a 2-sigma signal that CP is violated in the neutrino sector. A new proposal for a T2K-II upgrade is aiming at getting 10 times more statistics by 2026. HyperKamiokande (HK) will then take over in Japan with a first tank foreseen in 2026 and a second one planned for 2033. Rubbia then presents the DUNE/LBNF project in the USA. The SBN and the WA105/ProtoDUNE detectors are the current milestones towards the DUNE detector. He presents the status of MicroBooNE (part of the SBN) and of WA105 and the associated financial resources plus foreseen requests in Switzerland. He notes a steady increase of FLARE funding for the neutrino Pillar from 2013 to 2016, which is still below the guideline of about 1.3 MCHF/year according to the (60:20:20) repartition in the pillars proposed last year. There will be

² An updated FLARE Table with the new values for the ATLAS experiment was sent out to Board members on 30 August 2016.

three FLARE proposals, but all only for the two-year period of 2017–2018. As noted by the Chair, the DUNE construction funds are not yet included in the projected numbers; they will be requested in 2018 and beyond. This is also the time when the T2K-related funding is to be re-considered in the context of the succession of Alain Blondel. He ends with a slide on the paths towards a CPV discovery with the foreseen facilities both in the US and in Japan. Rubbia notes that, on a same timescale of 10 years, HK and DUNE have about equal sensitivity to CPV. Asked by Kirch, he clarifies that the DUNE contribution of Basel is related to theory, with Stefan Antusch being interested in proton decay and other aspects of the experiment. He also explains for Tobias Golling that the two experiments are indeed complementary, but that Switzerland should choose to contribute to only one of the two, since with limited resources it is not realistic to get involved in the two at the same time. He reminds that in 2005–2006 Switzerland decided to get involved in T2K rather than in NOVA and this was a good decision. Xin Wu wonders if going this time to the US rather than to Japan would not be risky. Rubbia answers that NOVA had a slow start and will get competitive in the coming years. Asked by Maurice Bourquin about the risk on the experiments, he answers that in Japan, the approval of HK is expected by the end of 2016. The project is international, but Japan is deciding. For DUNE, there is a funding of 1.5 G\$ on the table for the whole project and a strong push for the future of particle physics. CERN is now also funding outside projects in the US. Xavier Reymond adds that the US foresees a 70% involvement on the facility (LBNF), while for the DUNE detector only 30% of the funding would come from the US and the rest from non-US funds. Rubbia notes that he tried to influence the view and that DUNE should indeed become the first truly international project on US territory. The discussion also included some more technical aspects on the comparison of Water Cherenkov (WC) and Liquid Argon (LAr); on the systematics in the CPV sensitivity plot; and on how JUNO compares to HK and DUNE. On the latter point, Rubbia thinks that the science case for such a smaller experiment – possibly only reaching the 2-sigma level on mass hierarchy and CPV – is not so compelling. There is the need of big experiments like DUNE and HK to reach the 5-sigma goal. The Chair then focuses the discussion again by asking whether we feel the need to converge on one single experiment. Rubbia thinks that if we want a significant contribution with some visibility we cannot afford to be in two experiments. Giuseppe Iacobucci clarifies that the University of Geneva has a commitment for a full professor in mid-2018 for the succession of Blondel. On the short time, Blondel will submit a FLARE request on T2K and by the time of his succession, we will know how things evolve with DUNE and HK. Rubbia agrees and confirms that SBN and DUNE will also submit a FLARE proposal for two years, but he thinks that the need to discuss and decide on the participation in the two first detectors of DUNE shall already be done next year. Based on the uncertainty on the succession of Blondel, Kirch finds it not very fair to include FLARE funding on the T2K/HK line beyond 2018. Iacobucci defends the continuation of the project to prepare for Blondel's successor. As proposed by Teresa Montaruli, a solution would be to have a new line in the CHIPP FLARE table starting in 2018 for a long base-line neutrino programme to be defined later on. To conclude this very long discussion, the Chair stresses the need to know for the next Board meeting what the PIs really will submit in 2016 and what they foresee in the future. These are two different things, but both are important to be tracked.

→ Admin.: to ask PIs about their precise plan on the FLARE submissions

9. Swiss R&D programme on the Future Circular Collider (FCC) (→ slides)

Lenny Rivkin presents his slides on the FCC, which has a goal to achieve hadron collisions at energies of 100 TeV, with a circular tunnel of 80 to 100 km of circumference. The collaboration includes currently 75 institutes from 26 countries. In Switzerland, these are EPFL, PSI, and the universities of Basel, Bern, and Geneva. The Swiss R&D developments are coordinated by the Swiss Center for Accelerator Research and Technology (CHART). The centre has as main activity the development of super-conducting magnets of the Canted-Cosine-Theta (CCT) type. It is the option studied for the 16 Tesla main dipole of the FCC. Xavier Reymond wonders about the status of CHART and when it will become operational. Rivkin explains that the project is close to signing and starting hiring people. Reymond thinks it would be good to foresee an inauguration event for the visibility of the project. The Chair asks about the selection of the collaborators. This would be done inside the EuroCirCol collaboration, which has an overall budget of about 20 MCHF. But as pointed out by the Chair, Lenny Rivkin is responsible for the 2 MCHF from SERI. He asks whether there is a steering committee and how reporting is done. Rivkin explains that the money is provided to PSI and that the reporting goes to SERI. He shows the organisation of the CHART structure with a steering committee composed of CERN, EPFL, ETHZ, PSI, SERI, Uni. GE and the THz-Laser Acceleration Network.

10. SWHEPPS 2016: report and follow-up (→ slides)

Rainer Wallny presents his slides on the Strategy Workshop on High-Energy Particle Physics in Switzerland (SWHEPPS), which was held on 7–9 June at the Seminarhotel am Ägerisee. The workshop attracted 71 participants (including 11 external speakers) and stayed within budget thanks in particular to the contribution of 12 kCHF from SCNAT. Wallny reminds the aim of the workshop and shows the programme table, before taking the opportunity to thank the conveners and the speakers for great talks. He then presents the main outcome of the summary sessions. The 750-GeV bump was the subject of quite some discussion. As announced at ICHEP earlier this month, the bump is gone, but there is still a lot of excitement remaining from the flavour anomalies. He notes also in particular the connected physics goal with neutrinos, despite the fact that both programmes run in parallel. There are also connections with dark matter searches depending on models. He finishes with the question on when to write a White Paper (WP) on Pillar 1. The next major milestone is the country input needed by 2018 for the European Strategy of Particle Physics to be updated by 2019. He wishes the CHIPP EB to work out a proposal on how to prepare this in all three pillars. The first step towards a WP is to get written summaries of the sessions and discussions by the convenors in the coming month to be ready for the Board 2016-03. Related to the discussion above (item 9), Klaus Kirch supports having an executive summary by January. He also suggests that the country input for 2018 could be an updated CHIPP Roadmap. This would be followed by an implementation document of the European strategy. Wallny writes on the white board the milestones he sees: SWHEPPS summary (by early Oct.), WP executive summary (by Jan. 2017), Pillar 1 WP in 2017, and finally the country input together with Pillar 2 and 3 by 2018. There seems to be general agreement on this timeline. The Chair however wonders if a document defining the whole CHIPP prioritisation would not be more important to have by January. Indeed, he thinks that we all agree on Pillar 1 priorities and the science case has been described in plenty of documents for the LHC and the HL-LHC. Michele Weber notes, however, that the fact to have a paper on Pillar 1 matters. Having a WP for the two other pillars and not for Pillar 1 is harming Pillar 1, in his view. André Rubbia sees the need to summarise the science (after the 750-GeV bump dissolved) and so to get a reference document on what the science should be. Giuseppe Iacobucci suggests writing something similar to the neutrino WP.

→ Wallny: to collect the SWHEPPS session summaries from the convenors

11. Scientific and technologic collaboration with astronomers in CHAPs

Teresa Montaruli presents a slide presenting the scientific aspects of common interest (dark matter, neutrino masses, early universe physics, dark energy, gravitational waves) and the potential collaboration in technology and computing. The latter include in particular the big data aspects, where she mentions an SKA/CTA meeting at the CSCS on Sep. 5. She also notes the possibility to produce jointly with CHAPs a list of Swiss and foreign companies with their expertise and achievements. Common proposals to InnoSuisse (aka commission for technology innovation) could also be discussed. Klaus Kirch notes that we have an observer from CHAPs in CHIPP, but we do not get a lot of interest for collaboration. Günther Dissertori mentions that he has talked to Alexandre Refregier (CHAPs observer) and he apologized not being able to come today. Montaruli, as CHIPP observer in CHAPs, complains not to be invited in meetings over the last months, if at all such meetings are taking place. The Chair wonders if there is an interest of LHC computing to find synergies with astronomers. Dissertori notes that there are discussions happening now for astronomy projects at the CSCS. It is agreed that Christoph Grab should take contact with Jean-Paul Kneib to discuss potential synergies.

→ Grab: to discuss potential computing synergies with Jean-Paul Kneib

12. Hosting big international conferences in Switzerland

Teresa Montaruli mentions that the Geneva Tourism & Conventions Bureau is interested in the organisation of large conferences at the International Conference Center of Geneva (CICG) in the area of high-energy particle or astro-particle physics. Actually, a company contacted CHIPP members to probe possibilities. Some steps have already been done to organise the International Cosmic Ray Conference (ICRC) of 2021. The date of 15–22 July 2021 has been reserved at the CICG and the decision will be taken next year in Korea during ICRC 2017. The LOC would be composed of astro-particle physicists at the University of Geneva. Another possibility would be the EPS-ICHEP 2021. The Chair asks whether the Board is willing to go into such an organisation. If so, he would like to have CHIPP as a main organiser. André Rubbia thinks that we need to have a motivation to do so, while Giuseppe Iacobucci finds ICHEP 2019 more interesting than 2021 as there will be the results from the completed LHC run 2. The issue is kept open with no real decision.

13. Nominations for election of the next APPEC GA Chair and Secretary

Teresa Montaruli announces that the next General Assembly of APPEC will take place on 7 November 2016 in Stockholm. It will be the time for the election of a new Chair and General Secretary. The current Chair, Franck Linde, cannot be consecutively re-elected. Switzerland is asked to make nominations by the end of August. She mentions a few names of possible candidates for nomination. She answers André Rubbia that there are no statements from the candidates, since we are still at the nomination stage. She asks Board members to please send her feedback on the suggested names or to propose new ones by the end of the week.

14. Gender balance issue

The Chair introduces the topic saying that he got grabbed at the SWHEPPS meeting by three women (Laura Baudis, Teresa Montaruli and Florencia Canelli) complaining about the low number of female participants. While everybody recognises the gender balance issue, it is not so clear what to do concretely. As the meeting is already very late, the discussion is postponed to another meeting. In the meantime, Teresa Montaruli wishes to announce with a slide the Gender in Physics Day to be held in Geneva on 26–27 January 2017. The event is organised in the frame of the EU-funded project GENERA (Gender Equality Network in the European Research Area) with a first day at the University of Geneva and the second at CERN. The LOC includes several CHIPP members and Montaruli hopes for an active participation of the CHIPP community to make this meeting a success.

INFORMATION ITEMS

15. SNSF Research Council applications

The Chair notes that the application deadline for the succession of Antonio Ereditato in the SNSF Research Council was finally set in the middle of the holiday period on 15 August 2016. This prevented CHIPP to discuss and propose candidates as originally foreseen for this meeting. The Chair notes that he did not get a lot of feedback, but that some people thought that sending inputs to SNSF could be counter productive. The Board members have been informed about the deadline per e-mail and he therefore hopes that good candidates applied.

16. Zuoz Summer School 2016

Adrian Signer prepared a couple of slides to report on the summer school, which was held last week on 14–20 August 2016 in Zuoz (GR). There were 82 participants (48 from Switzerland, 32 from Europe and 2 from other countries), including the 9 lecturers. He emphasises that it was neither an experimental school, nor a theoretical school, but really both together. The next Zuoz Summer School is already fixed to be on 12–18 August 2018.

17. CHIPP PhD Winter School 2017

Florencia Canelli quickly advertises the CHIPP Winter School 2017 to be held on 13–18 February 2017 at the Hotel Rischli in Sörerberg (LU). The school would be for about 20 students and will have lectures covering collider, neutrino and astroparticle physics with a balanced focus on experiment and theory. Confirmed lecturers are currently: T. Montaruli, M. Schumann, and A. Rubbia. A poster session for participants is foreseen, as well as informal research discussions in the evening. The registration fees shall not exceed ~1 kCHF.

18. SCNAT funding requests

The Chair briefly informs that the next CHIPP funding requests to the SCNAT MAP platform are due by 26 August 2016 to cover expenses in 2017. CHIPP foresees to ask support for the CHIPP PhD Winter School (~10–12 kCHF), the continuation of the “Dialog” outreach project (~5–10 kCHF) on the new SCNAT thematic portal following-up on “particlephysics.ch”. A possible third request could be for membership fees for the International Particle Physics Outreach Group (IPPOG). Indeed, Hans Peter Beck explains that an IPPOG Memorandum of Understanding is getting finalised and includes the introduction of a membership fee per country based on its Gross Domestic Product (GDP). For Switzerland, the amount would be of the order of 3 kEUR. The Chair suggests requesting this amount to SCNAT. Klaus Kirch recalls that doing this for APPEC membership was not successful in the past, but one can try again by emphasising the outreach aspects of IPPOG. Olivier Schneider adds that we will need to request the money every year and wonders if this could be at the detriment of other support for CHIPP. It is however agreed to give it a try this year.

→ HPB/MT: to submit a SCNAT request for IPPOG membership

19. EPPCN activities

Since the meeting is getting very late, the Chair proposes to include this item in the formal plenary meeting of tomorrow.

20. New professorships at CHIPP institutes: report from each institute

As usual, the Chair invites Board members to report about any new professorship positions in CHIPP institutes. Nothing is reported.

21. Next CHIPP Plenary and Board meetings

The Chair reminds the date of the next Board meeting to be held on Friday, 14 October 2016 at 13:15 in Bern. He also announces that the next CHIPP Plenary will again be joined to the SPS annual meeting scheduled on 22–24 August 2017, in Geneva (CERN & CIG). The CHIPP Board meeting 2017-02 is foreseen to be held just before, on Monday, 21 August.

22. A.O.B.

None. People wishing to join for having dinner together in Lugano can gather outside of the building.

The Chair closes this long meeting at 19:50.

7 October 2016

written by: Marc Türler

approved by: Tatsuya Nakada