

Minutes of the Board meeting 2021-03 on 4 November 2021

Time of the meeting: Thursday, 4 November, 13h00-16h00

Place of the meeting: ZOOM

Indico link: https://indico.cern.ch/event/1069880/

1. Welcome and agenda

Rainer Wallny¹¹, the CHIPP chair, welcomes the Board members, the honorary Board members, and the observers to the Board. The Chairman also welcomes Marina Marinkovic, new Professor at ETH Zurich. Gino Isidori introduces and welcomes Peter Stoffer, the new Professor at the University of Zurich. A special welcome and thanks was extended to Bernd Gotsmann (SNSF), who will join the meeting at 14h00. The agenda is approved with the addition in the AOB of the young researcher's proposal and the outreach report from Katharina Müller. The Chairman asks for a minute of silence to remember Prof. Roland Engfer (U. Zurich) who passed away on 18 October at the age of 86.

ADMINISTRATIVE ITEMS

2. Apologies and Proxy votes

Board members with voting rights (as of 4 November 2021): 71

Present: Beck, Braccini, Caminada, Canelli, Crivelli, De Cosa, Dissertori, Golling, Hildebrandt, Isidori, Kilminster, Kunz, Lauss, Marinkovic, Montaruli, Piegsa, Pozzorini, Ritt, Schneider, Schramm, Serra, Sfyrla, Shchutska, Signer, Spira, Sanchez-Nieto, Soter, Stoffer, Wallny (Chair), Weber, Wu.

Other participants: Benelli (Admin.), Gallo (Obs. SNSF), Salzarulo (Obs. SERI), Sommer (Obs. SNF), Türler (Obs. SCNAT)

Apologies: Antusch, Donega, Seidel

The Chair details the proxy votes announced before the meeting²².

Quorum: 24 votes (= 1/3 of the Board members; Art. 24.1 Statutes); Votes present: 30 present + 2 proxies + 1 electronic vote = 33 → The quorum is reached.

3. Minutes of the last meeting (2020-01 [February 2020])

The Chair asks for comments concerning the minutes of the previous meeting. Since there are none, the Chair invites the Board to approve them. The minutes are approved and will be published on the CHIPP website.

Rainer explains the procedure for electronic voting via zoom.

¹¹ https://indico.cern.ch/event/1069880/attachments/2339475/3988202/Board2021-03 Slide V17.pdf

²² Adrien Signer for Klaus Kirch, Malte Hildebrandt for Mike Seidel

The Chairman informs the Board that Prof. Florencia Canelli (UZH) has been appointed CERN Council Swiss Representative and Prof. Laura Baudis (UZH) was elected member of the Academy of Sciences and Literature Mainz weblink. The Board compliments both with applause.

DECISION ITEMS

4. CHIPP activities and Budget 2021

Angela introduces the planned activities and budget for the year 2022. As in the past, CHIPP has a list of planned activities in the following themes: science, communication and outreach, funding, and association. The presented budget has a planned expense of 156 KCHF covered by the income of 88 KCHF from membership fees, 20 KCHF of support for the EPPCN from SERI and CERN, and thankfully around 42 KCHF of support from the SCNAT. The main activities for this year will be the PhD Zuoz School and the MLHEP 2022 School; they have been postponed to 2022 because of the COVID emergency and the SCNAT has kindly agreed to keep the promised funding for 2022. In January 2022 the CHIPP Winter school will be hosted in Adelboden. CHIPP will continue its engagement on the SCNAT web portal, publishing news, articles, and events of interest to the physics community thanks to the collaboration with a science journalist. The remuneration of the journalist together with the IPPOG membership should be covered by a SCNAT grant. A deficit of around 5 KCHF is foreseen. This can be supported by the estimated start of year assets of ~40 KCHF.

The Board unanimously:

Approves the CHIPP activities for 2022,

Approves the CHIPP budget 2022 resulting from the activities, and

Approves the 2022 membership fees for individual members and for institutions.

5. Election of the CHIPP Account Auditor

The Chair reminds us that the election of the CHIPP Account Auditor belongs to the CHIPP Board. CHIPP has two auditors: Saverio Braccini (UniBe) and Ben Kilminster (U. Zurich). Since Ben Kilminster will be a CHIPP Vice-Chair from Jan 2022, the EB has asked for nominations, which has resulted in one candidate: Steven Schramm (U. of Geneva).

The Chair proceeds with the vote.

The Board unanimously elects Steven Schramm for a first term as CHIPP auditor (Jun 2021 – Jun 2024).

DISCUSSION ITEMS

6. CHIPP responsibilities:

The Chairman explains that we are in the process of migrating several responsibilities from the outgoing CHIPP EB to the incoming one. Some meetings require or wish to have the presence of funding agencies but our funding agencies either cannot be present, and they choose to deputize it to EB members who afterward report back to them. Rainer was present as a contact person to the DUNE RRB and then similarly for the HyperK financial forum for his role of CHIPP Chair; he was also the FCC national contact and he acted on the high intensity muon beam (HIMB) steering committee. To choose the new representative, we should consider that for some positions (DUNE/HyperK), there is a preference for someone who is unbiased toward the projects; for other positions there is a preference for someone who is engaged in the project. It is not a strong requirement to be an expert on the topic; the naive approach has the positive aspect of a fresh view and the ability to ask basic and unexpected questions. What is important is to be willing to learn about the issues from colleagues and ready to represent Switzerland adequately.

- Anna Sfyrla for LHC M&O FLARE proposal → continue to be the contact person for the next two years (Board 2020-01/5) minutes
- DUNE RRB: Rainer Wallny → One Vice Chair
- HyperK: Rainer Wallny → same Vice Chair (Board 2020-01/5 minutes)
- Xin Wu is the CHIPP contact for next generation Double beta decay experiments (EB 2021-05/10)
- Rainer Wallny is the FCC national contact as CHIPP chair (Roadmap Workshop 2020 → link, minutes)

■ HIMB Steering Committee → Vice Chair

Deliberation in the next and last EB Dec 14th and it will be announced in Board-01 in 2022.

7. Fostering CH collaboration towards a FCC (ee/hh)

Anna Sfyrla shares her <u>slides</u>. She reports on the FCC workshop, which was held in Geneva on 7 September 2021 to introduce the community to FCC efforts, to discuss what has been happening in the FCC internationally and to identify common grounds of activities within Switzerland. Another workshop is meant to occur at end of January at the University of Zurich to identify the interested parties for collaborative activities and potentially also work towards fundraising. We are suggesting the creation of a working group composed of interested people (either or both to ee and hh FCC option) and turning the workshop into a working meeting, which will lead to concrete proposals on what activities to pursue. Based on the assumption that a second working meeting will take place, we could prepare a collaborative project of funding requests, potentially even for submission in October 22, a Div II grant with several PIs. This second meeting would be a closed working meeting. A Google form will be circulated to collect the expressions of interest.

The indico <u>webpage</u> contains all the materials shown during the first meeting and could be used as reference for official proceedings; the CHIPP Roadmap is a very good reference for technology interests for FCC in Switzerland.

At the moment of circulating these minutes it has been decided to postpone the FCC Workshop to a later date in spring when the COVID restrictions will allow it.

8. Third party funding Working Group.

Rainer Wallny introduces Bernd Gotsmann, the president of Division II, Cornelia Summer and Valentina Gallo from their offices at SNSF. One of the CHIPP duties according to the bylaws is to look at the facilitation of particle physics research to participate in experiments. Following this remit CHIPP has assembled its own data about funding success of Swiss particle and astro-particle PIs in the last years and plans to reconcile this data with publicly available data as well as any data SNSF can share. Michele Weber chairs the meeting showing the slides. The goal will be to find reasonable funding for CHIPP and for the long-term big science efforts. Gotsmann explains that he is glad to participate at the Board meeting to reply to our questions, but also to understand better CHIPP's particular situation. One difficulty for CHIPP is the situation of dependencies on other funding lines such as FLARE that does not concern other groups who apply for project funding in Division II of the SNSF. Gotsmann stresses that SNSF funds proposals on a competitive level, not to provide continuous operational support. In the past this was not so visible since CHIPP success rates were very high compared to other fields. Secondly, there is the largest challenge of timing: CHIPP commitments are typically longer than SNSF project funding. SNSF limits are four years and could be out of sync with FLARE grants; on top of this they are independently evaluated. Particle physics has been and still is among the most successful ones regarding success rates. Gotsmann assures the Board that there is no plan and no tendency to devalue fundamental research funding from the SNSF.

Gotsmann explains that the main reasons for the decrease in the rate of success are:

- The number of funding requests grows much more that the available funds from SNSF. (Requests increased by about a factor of 2 in the last 10 years while the available budget increased by 50%.)
- The way to evaluate and fund a project has changed over the last few years; SNSF look more and more at the quality of projects.
- The way to evaluate a discipline has repeatedly been discussed internally at the SNSF; the
 composition of the evaluating panel is a challenge since the panels should be as broad as
 possible but also have the technical expertise.

One of the problems raised by the Board is the conflict of interest that some Council members have; they must leave the decision panel when they are most needed for their punctual expertise, expertise that is sometime not available to the other members of the panel. Gotsmann replies that this is one of concerns they have, and the solution has been found: inviting external experts from other countries. The experience tells the SNSF that the process has been improved doing this. Gotsmann suggests to CHIPP PIs to make an effort in the calls to introduce and explain the topics and issues as much as possible for non-specialized researchers in order to evaluate difficult proposals. Gotsmann invites the Board members to apply as Council members to increase the expertise of the SNSF panel.

Another problem raised by the CHIPP Board is related to the work of students concerning the MoU signed by the experiment and Switzerland. These projects are educational since it is during the PhD that a student acquires the knowledge on how to build and run a specific detector. This is explained in the proposals, but it's difficult to evaluate them as innovative and original; under these criteria they fail, but the work is necessary for their future and for Switzerland. One solution could be to evaluate one

of the four years of the PhD with a view to fulfilling these MoU criteria. Gotsmann reminds us that for the evaluation of grants for PhD students, one of the important criteria is relevance; this could compensate for originality. The various evaluation criteria can carry different weight, but the panel will evaluate the overall competitiveness of each proposal.

Gotsmann explains that it is not possible to change the policy of evaluating projects in between two FLARE calls, but there is willingness to consider with SERI changes for the next FLARE terms.

Relaxing the number of grants for PIs is not going to help the problem of the rate of success; it will be evaluated anyway if any submitted request is an independent, non-overlapping grant.

The discussion of funding can be well extended to other fields which have long-term commitments like Particle Physics, for example, Space and Astro. The commitments with long-term projects are ruled via the MoU and RRB meeting with the experiment; in Switzerland it is the PIs that take the decision on the amount of committed funding, while in other countries the funding agencies intervene in the decisions. The SNSF does not have the legal right to commit more than 4 years in project funding.

CHIPP has already expressed the long term will of the community via the Roadmap, which is an instrument for SERI and SNSF for taking an educated funding decision. The CHIPP Board thanks the SNSF for the very constructive and open discussion.

9. Outreach updates

Katharina Müller gives a short update of the outreach group.

HSSIP: The high school internship program which took place in the last two weeks of October 17-30 was a great success; 24 highly motivated students participated; they had visits, lectures and most importantly, they took part in several projects every day. All the details are available on the Indico webpage. On Friday afternoon, they had a conference and each group gave a 10 to 15 minute-talk on their project; it was amazing how much they understood about their projects. Benedikt Vogel will produce a short video and an article (link).

Scientific writer: Benedict Vogel wrote about 10 articles per year for 7 years for CHIPP. It was funded by a SCNAT funding from 2015. Last year the EB asked for a change, mainly to have new input and fresh ideas. Katharina Müller interviewed some candidates and chose Barbara Warmbein a freelancer with a passion for particle physics. She was a scientific writer for the German physics community; she also worked at CERN in the Press Office and for the European Space Agency, so she is actually an ideal candidate. She will start on January 22, and we agreed to have 10 articles spread throughout the year.

10. CHIPP Schools and future events

CHIPP Winter School: the school will take place in Adelboden at The Cambrian Hotel from the 16th to 21st of January. Registrations are open and the deadline for application is the 1st of December; the school will be focused on collider physics, cosmology, neutrino physics, flavor physics and there is also a course on machine learning and its application in particle physics. The fee is 950 francs, which includes accommodation and meals. Please invite your students to participate; priority will be given to CHIPP students before accepting registrations from students from other countries. To be able to participate the Covid certificate is required. The school has an Indico webpage.

Zuoz School: Adrian Signer reports on the status of the organization. The school is planned but we will finally decide in February or March whether to open registration. Fees will be reduced for early registration. The program is about 90% the same as last year.

MLHEP2022: Lesya Shchutska reports on the MLHEP 2022. It is still too early to know if the school will take place in person; the decision will be taken in March.

PSI 2022: Adrian Signer presents the PSI workshop. This is PSI Tri annual conference; PSI in the Workshop name stands for physics of symmetries and interactions in the total coincidence that is in PSI. We expect 150 participants.

INFORMATION ITEMS

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

EPFL: Olivier Schneider reports on the opening of a new position, which is a tenure track assistant professorship in experimental particle physics; the deadline for applications is November 15^{th.}

PSI: a new professor has joined the theory group, Harald Ita. He was Professor at the University of

Freiburg (Germany) and now he has joined PSI obtaining as Senior Scientist, he is a guest professor at the University of Zurich.

No other new professorships are reported.

Rainer Wallny closes the meeting looking back as CHPP chair at the work done in the last two years by the entire community. He highlights the tasks that are to be addressed in the future. The official handover between new and old CHIPP EB will happen at the last EB meeting on 14 December in Bern.

Rainer thanks the EB colleagues to have so valiantly led these efforts together and for the support shown. Michele, Anna and Gino express the EB gratitude to Rainer for leading and accomplishing a huge amount of work and also for keeping the community together with all the differences in prioritization. A big thank you also to Anna Sfyrla for her tireless work and to Angela Benelli valiantly supporting the CHIPP chair and EB.

Minutes written by Angela Benelli,

checked by Rainer Wallny and EB