

Time of the meeting:

Minutes of the Board 2015-03 on 23 October 2015

Place of the meeting: Swiss National Science Foundation, Wildhainweg 21, Bern, meeting room 56

Friday, 23 October 2015 from 13:15 to ~16:15

The Chair opens the meeting at 13:15 (→ slides of the Chair)

1. Welcome and agenda (→ document)

The Chair welcomes the Board members, Honorary Board members and the Observers at the Board. He welcomes, as new Board members, Prof. Anna Sfyrla (Uni. of Geneva, excused). The proposed agenda is approved, with an addition to item 11 on outreach to include the future of the web site "particlephysics.ch".

ADMINISTRATIVE ITEMS

2. Apologies and Proxy votes

Board members with voting rights (as of 22 October 2015): 65

Present: Antusch, Beck, Blondel, Colangelo, Dissertori, Ereditato, Grab, Hildebrandt, Kilminster, Mermod, Montaruli, Pozzorini, Ritt, Rivkin, Schneider (Chair), Serra, Signer, Spira, Straumann, Wallny, Weber, Wu Other participants: Maillard (Obs. SNSF), Schopper (Obs. SPS), Steinacher (Obs. SERI), Türler (Admin.) The Chair informs about the apologies received and about the proxy votes announced before the meeting¹. Quorum: 22 votes (= 1/3 of the Board members; Art. 24.1 Statutes); Votes present: 22 + 11 proxies = 33 → The quorum is reached.

3. **Minutes** of the last meeting (2015-02 [29/30 June 2015]) (→ **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 an Executive Board member for 2016–2017 (→ document)

The Chair introduces the topic by reminding the election at Board 2015-02 of Tatsuya Nakada as new Executive Board (EB) member and as CHIPP Chair for 2016–2017. He also reminds that Rainer Wallny was no more standing for re-election for a second term, thus implying the need to find a new candidate. The call for nomination resulted in 21 nominations from 5 different institutes. Three Board members have been nominated, but Günther Dissertori is the only candidate standing for election. The Chair states that Dissertori has the support of the EB and he invites him to give a short statement. Dissertori presents himself and his active participation in CHIPP since he became a professor at ETHZ 14 years ago. He has seen a lot of CHIPP over the years and even organised the very first CHIPP School in 2008. He is now the Deputy Chair of the CMS Collaboration Board and Head of the Institute for Particle Physics, ETHZ. He expresses that given the circumstances with the leave of Wallny from the EB, he is ready to serve to be a representative of the Pillar 1. He thinks that the EB has done a very good job until now and he will try to take up the coming challenges. The Chair thanks Dissertori for the statement and asks him to leave the room. Wallny expresses his regrets not to continue in the EB given the circumstances. He is very happy to be able to leave the task

¹ Grab (for *Biland*), Hildebrandt (for *Pohl*), Kilminster (for *Canelli*), Montaruli (for *Golling*), Ritt (for *Hajdas*), Schneider (for *Bay*), Serra (for *Isidori*), Signer (for *Kirch*), Straumann (for *Baudis*), Wallny (for *Horisberger*), Wu (for *Iacobucci*).

to Dissertori and he thanks the Board for understanding the situation. As there are no further comments, the Chair proceeds with the vote.

In absence of the candidate, the Board in open vote and with unanimity elects Günther Dissertori for a 1st term as CHIPP EB member from 1 January 2016 to 31 December 2017.

Dissertori is called back and enters the room with applause. He thanks the Board for its confidence.

5. CHIPP activities 2016: planning and budget (→ document)

The Chair introduces the topic, mentioning that, as in previous years, the budget follows the list of planned activities for the coming year. This time, however, there is also a proposal from the EB for the Swiss representative in the European Particle Physics Communication Network (EPPCN). The Chair explains that this is included here as it affects the activities and the budget for 2016. He reminds the issue of finding a suitable candidate since more than 2 years for this position consisting primarily in being a contact person to transmit CERN press releases to the media with the addition of some "Swissness" (Swiss involvement, translation, etc.). He mentions that CERN discouraged us to have an active journalist and that Marc Türler (Admin.) thereafter volunteered for the mandate. The idea is to increase from 50% to 60% the contract of Türler thanks to additional funding from SERI. As there are no questions or remarks about this proposal, the Chair continues with the presentation of the planned activities of 2016 in the following themes: science, communication & outreach, funding, and association. The presented budget overview has expenses of 141 kCHF mostly covered by the income of 128 kCHF (membership fees, SCNAT support and the support for the EPPCN from SERI & CERN). The negative balance of -13 kCHF is found to be acceptable given the (estimated) asset at the start of the year of ~58 kCHF. The Chair therefore proposes to keep both the membership fees of 110 CHF/capita and the institutional fees of 5'600 CHF (Basel: 2'000 CHF) unchanged as compared to 2015. He then opens the discussion on the points to be approved. Ueli Straumann states that the there is no administrative issue with the proposed increase of Türler's contract at the UZH. Martin Steinacher expresses that being the host country of CERN, while being inactive at the EPPCN was a problem. He is glad that there is a solution and that SERI could find a way to finance this.

The Board unanimously

- approves the EB proposal for the EPPCN representative,
- approves the CHIPP activities for 2016,
- approves the CHIPP budget 2016 as resulting from the approved activities, and
- approves the membership fee 2016 of 110 CHF per individual member plus the institutional fee at 5'600 CHF/institute, except for Basel (2'000 CHF).

Lenny Rivkin suggests that the names of the contact person in the press offices of the different institutes be transmitted to Türler.

- → Admin.: to prepare the call for membership and institutional fees
- → Admin.: to get press office contact information for the Swiss institutes

6. Revision of CHIPP Prize procedures (<u>→ document</u>)

The Chair presents the EB proposal for a revision of the CHIPP Prize procedures, as distributed with the Board documents. Stefan Ritt asks about the reason for the explicit mention that only one candidate can get the award. Adrian Signer explains that this year there were two very similar candidatures on the same experiment. It would have been impossible to give the prize to only one of the two. He thinks that it is better to make the issue clear to everybody as part of the procedures. The Chair, as proxy of Aurelio Bay, mentions that he would have agreed to allow the Prize to be split. Ben Kilminster then questions the awarding of the prize before the completion of the PhD. Malte Hildebrandt recalls that the idea was to be able to put the award in the CV for the search of a Postdoc position. Antonio Ereditato adds that the idea was also to give an additional push to the successful candidate to achieve even better results for the PhD. Hans Peter Beck thinks, however, that it is a reduction of the weight of the Prize to have it not for the completion of the PhD thesis. Asked by Nicolas Serra, the Chair clarifies that a PhD shared with another foreign institute is accepted for the prize as long as the PhD defence is (also) held in Switzerland. Alain Blondel then raises a problem with the yearly application deadline. The candidates with the best chances are the ones being just a few months before completion at the application deadline. Candidates being out of phase are disfavoured, because often the results and publications are ready just before the end of the work. Ritt agrees that this is

unfair for the ones out of sync, while Kilminster suggests to allow for recently completed theses. Stefan Antusch proposes to have applications all over the year before completion. Given this intense discussion, The Chair asks the Board whether to keep the second item of the modified procedures as it has been presented or to rephrase it to allow for candidates that did not have completed their thesis 12 months before the application deadline. The latter gets a majority of 13 votes against 8. This opinion triggered another short discussion on whether the same candidate would then be allowed to apply in several consecutive years with the conclusion that this should be allowed. The other proposed changes were approved unanimously. The Chair closes the discussion by saying that the EB will take care of implementing the agreed changes. → EB: to implement the changes of the CHIPP Prize procedure

DISCUSSION ITEMS

7. CHIPP PhD Winter School continuation and organisation

The Chair invites Adrian Signer to present this agenda item. After introducing the topic with the history of the CHIPP PhD Winter School, Signer shows the results, in graphical format, of the Board survey on the continuation and the organisation of the CHIPP School. Only 11 Board members filled the on-line survey, but four of them (anonymously) declared themselves ready to co-organise the next CHIPP Winter School. Signer concludes that we can probably find the needed people to organise this school in 2017, but that this needs to be defined by the end of the year in order to get organised, find the place, etc. In the following discussion, Signer clarifies to Hans Peter Beck that the school is not advertised outside of Switzerland. Antonio Ereditato adds that the original idea was to have it only for Swiss students. He thinks that there could be international partners, but that having a fully open school is probably not a good choice. Beck thinks that having half the attendance from abroad would be fine. Andreas Schopper suggests joining it with the Austrians to start with. Günther Dissertori finds the school important for the Swiss students to know each other and to have a distinctive feature each time. He suggests for instance a partnership with astrophysics and cosmology and proposes to approach Ruth Durrer about this. Gilberto Colangelo notes the need of coordination with the Zuoz Summer School and thinks that a same group shall define the programme of the two schools. Signer however reminds that the majority of the attendance at the Zuoz School comes from Germany and the United Kingdom. Michael Spira sees the importance to have a maximum of flexibility in the topics of the school, while Nicola Serra notes that a national school is mandatory in many countries. In general, it is expected that PhD students attend at least one national and two international schools over a PhD. Teresa Montaruli suggests to improve the organisation with one representative from each pillar to have a more balanced programme, which would be distinct from one year to the other. Ereditato wishes the organisers to be more careful with the choice of lecturers. Signer recalls that the contact with the lecturers takes some effort, since one has to convince them to take the time for this. The Chair closes this discussion which did not clearly converge on whether to continue with the CHIPP PhD Winter School and how. The Chair invites the Board members who said they would be ready to help with the organisation to please manifest themselves. Montaruli is the only one to say she is ready to contribute to the organisation. She thinks that there is the need of young people to join.

→ EB: to discuss the issue and identify organisers

8. White Paper on neutrino physics (\rightarrow document)

The Chair introduces the topic by reminding the main steps over the last one and a half years, which led to the writing by six Board members of the distributed White Paper (WP) on neutrino physics. The goal of the present discussion is to collect comments and reactions from the Board and to define the next step, which could be a formal endorsement by the Board, possibly after some iteration. The alternative to leave the document as it is as part of the present Board documents is not the preferred option and is not what the Board intended to do at the end of June in Bossey. The Chair then presents the comments and questions raised by the EB. Antonio Ereditato is of the opinion that the document should be endorsed as soon as possible by the Board, in recognition of the effort invested since more than a year, and especially this summer. He points out that there is a consensus of six people signing this document and agreeing on the prioritisation. The document does not micromanage in detail, because this is not its aim. All the details will be in the FLARE proposals. He adds that the original set of EB comments included some misunderstandings that he clarified immediately in his message of 30 September. He thinks it is important that everybody is aware of this and thus reads the message with all the given answers. The main misunderstanding was that the A–E list of priorities concerns only the *new* experiments and therefore does not mention GERDA and T2K. Although he respects all comments the Board can have, he sees the consensus among the authors as

a kind of miracle and therefore sees no way to significantly change the document. He proposes the Board to endorse it. The Chair clarifies that the EB comments shown to the Board today do not contain the abovementioned misunderstanding. Alain Blondel points out that the document is already very different from what it was last year and therefore is really a snapshot of the current status. It cannot be considered as valid for the years to come. Ereditato agrees and is ready to state this in the document. Ueli Straumann refers to the WP on astroparticle physics, where there is a paragraph about the Swiss contribution and what Switzerland plans to do exactly. Ereditato reminds that there is currently a full agreement between colleagues on the content of this document and that the coming FLARE requests will be in agreement with this WP. He adds that in one year, the neutrino PIs will be able to inform the Board precisely about what they do. But Straumann thinks that this should come before, because this shall be presented to the Board and the Board then agrees that this is a good idea and that one shall go ahead. Rainer Wallny comes back to some remaining ambiguities in the document. In particular it is not clear how the operations of T2K compare in priority with SBN and WA105. Teresa Montaruli adds that the relation of DUNE is unclear with respect to points 1 and 2, which provide the estimated requests for WA105 and SBN between 2016 and 2020. Would the funds for DUNE – if approved before 2020 – be cumulated or included in the quoted amounts of items 1 and 2 ? She also states that, with respect to FLARE, GERDA is a new project and as such also its operation and not only the future upgrade could appear in priority E. Ereditato argues that there is currently no Letter of Intent submitted for DUNE development and thus that it is not possible to predict the future at this stage. He then clarifies that the mentioned T2K upgrade is basically Hyper-K and that the Fermilab SBN programme consists of three projects: MicroBooNE, the SBND near detector (formerly called LAr1-ND), and ICARUS. Switzerland is involved in the two first ones. He, of course, agrees to clarify such things. Stefan Antusch points out that the WP does not mention theory. It should be made clear that this only concerns experimental neutrino physics. Blondel adds that the inputs of Antusch and Shaposhnikov in theory are important to mention and also mentions neutrino-related activities in Pillar 1 (e.g. heavy neutrino searches). Ereditato agrees. Straumann repeats that it is important to spell out more the detail of the Swiss contribution. Ereditato agrees to add one-two lines to clarify the contributions. He thinks it is important to have this endorsed for the LA FLARE meeting. Wallny explains that the LA FLARE recommendations – which will be presented in item 9 below – take the WP priorities into account. The Chair then asks the Board members whether they would like to endorse the modified document at the next Board meeting or via e-mail in the coming weeks. A majority of the Board members preferred an e-mail endorsement (16 votes against 4). To conclude the item, Martin Steinacher expressed thanks to Ereditato for coordinating the WP finalisation and also for his role as representative of the funding authorities in discussions at Fermilab.

- → EB: to provide a list of requested changes to the six authors of the WP
- → Chair: to organise the WP endorsement process via e-mail

On 2 November 2015, the Chair circulated by email a final version of the neutrino WP to the Board members with voting rights, asking them to answer the question "Do you agree that this document becomes now an official CHIPP document to be publicly accessible on the CHIPP website?" with a 10-day deadline (subsequently extended by one more day). A quorum of at least 1/3 of the Board members with voting rights (i.e. 66/3 = 22) was required and the decision was taken by simple majority of the votes expressed.

In an e-mail vote with 31 "yes" and 10 abstentions, the Board decided on 14 November 2015 that the neutrino white paper becomes an official CHIPP document publicly accessible on the CHIPP website.

9. Recommendation at next LA FLARE meeting

After the coffee break, the Chair presents the recommendations for the next meeting of the steering committee LA FLARE to be held on 9 November. He starts by saying that the EB has been asked to discuss this issue earlier than last year, which is what we are doing now. He then reminds the role of LA FLARE and the CHIPP funding priorities shown at the meeting of last year. He also reminds that at the last Board meeting at the Château de Bossey, the role of CHIPP in setting priorities was reaffirmed, which led to a pillar-by-pillar prioritisation exercise conducted in September. The EB formulated 2016 priorities based on the outcome of this exercise and on the neutrino White Paper. The Chair clarifies that the aim of today's discussion is just to verify with the Board the EB's interpretation of the 2016 priorities before presenting the draft slide of the FLARE funding priorities of 2016 for particle and astro-particle physics. Alain Blondel reacts

about the restriction to 'less than about' 100 kCHF for the maintenance & operations of T2K/NA61. The Chair agrees to change this to 'order of' 100 kCHF. Tristan Maillard clarifies that it is fine to express order of magnitude, but reminds that LA FLARE shall not discuss money, but only give priorities. Ben Kilminster also notes that for 2016 Darwin is not an approved project. The Chair could agree to leave only the reference to XENON for the coming year, but Teresa Montaruli would tend to leave Darwin, since Laura Baudis is not here to comment and since this does not make any difference as Darwin is understood as following on XENON. The Chair then refers to the list of principles of prioritisation shown last year. He points out that this was not strictly applied this year – with at least two things that are apparently not followed, as explained in the slides – and hopes that this will be again better respected next year. Asked by Michele Weber, the Chair and Rainer Wallny clarify that what is transmitted to the FLARE panel is only the slide with the prioritisation list, but that other introductory slides will be shown at the LA FLARE, which is a meeting for discussions. Wallny adds that the important thing is that the LA FLARE representatives have the backing of the Board. Antonio Ereditato then asks why we do not vote on this, since the Board votes on many other trivial things of less importance. Günther Dissertori explains that this is not done for administrative reasons, since it is a discussion item on the agenda and not a decision item. The Chair further reminds that the agenda was agreed without modification at the beginning of the meeting. He concludes the discussion by stating that the symbols for 'less than about' 100 kCHF will be changed to 'order of' signs on the prioritisation slide.

INFORMATION ITEMS

10. Evolution of FLARE

The Chair invites Tristan Maillard to give some information on the evolution of FLARE in 2017–2020. Maillard explains without slides that several changes in regular SNSF and FLARE proposals are under discussion. Concerning the regular SNSF, it should be possible to send in October 2016 proposals for 4 years. This will leave more flexibility in the use of the funds and lead to less bureaucracy for big projects. One criticism was indeed that SNSF funds too many small projects. Another change is that it will not be possible to propose two projects by the same PI. It is however possible to merge two similar projects, even if they are not synchronised. PIs in this situation should contact SNSF. Concerning FLARE. Maillard reminds that the call for the 2016 funding is only for 1 year. In the future, there is the wish to improve the evaluation process. To avoid conflicts of interest, the FLARE panel will include more and more international members. To ensure long-term commitments for big projects, proposals up to 4 years should be possible. The idea would then be to have calls only every second year, e.g. in November 2016 and in November 2018. The submission of a Letter of Intent the year before the application would not be needed anymore. There could be an international panel to which PIs expose their proposal in a meeting. All of this will be discussed again in the LA FLARE meeting. This triggered a few remarks and questions. Alain Blondel exposes the impossibility to have four students starting at the same time for four years, but Maillard replies that proposals every two years are perfectly fine. Gilberto Colangelo is happy to have less work by submitting only once a four-year proposal, but is worried that funding might be more easily reduced for such long proposals. Maillard assures that this will not happen as the funding will still be counted on an annual basis. He also notes that simplified extensions of two-year proposals by 2 additional years will not be possible.

11. Recent outreach activities and future of the web site "particlephysics.ch" (→ slides)

The Chair leaves the floor to Hans Peter Beck to present the outreach activities related to the bicentennial celebration of SCNAT. Beck reminds that this event is called "Forschung Live" and that CHIPP received funding via a special extension of the SNSF-Agora project "Interactions". The amount was used to participate in the Helvetic tour in Lucerne (9 August), Aarau (23 August) and Sion (25 September) with the screening of the movie "Particle Fever". The film was projected as part of the open-air cinema festivals in Lucerne and Aarau followed by an interview of Hans Peter Beck and Lea Caminada, respectively. The last event in Sion was in the auditorium of a high school. A first screening was for the students and another one in the evening for the general public. The latter was followed by a podium discussion where Olivier Schneider represented the particle physics viewpoint next to the theologist Jean-Blaise Fellay SJ and the philosopher Michel Siggen. The Chair reports that the discussion was interesting with good questions rather oriented towards religion and philosophy. Beck then mentions the TV show "Rosanna Checkt's" on the LHC, which was triggered via contacts from the bicentennial of SCNAT. After a full day of filming at CERN, this lively and sometimes funny outreach episode for children was broadcasted on SRF1 on 29 September and is still on-

line². Beck then discusses the future of the website "particlephysics.ch". He reminds that this multi-lingual site was developed as part of the CHIPP outreach project "Interactions", which was funded by SERI, SNSF/ Agora and SCNAT. With the end of the project, this website will become frozen and obsolete in the coming years. A new development is that Marcel Falk, head of communication at SCNAT, offered last week to port the "particlephysics.ch" sites to the thematic portal of the SCNAT site at "naturalsciences.ch". This would imply a change of the look of the pages, but if we agree to do so, SCNAT would be willing to increase its funding to CHIPP in order to keep the site active with the addition of new articles. A proposal for a possible increase by 4-6 kCHF should be submitted to SCNAT by the end of October, making it urgent to take a decision on this matter. Beck adds that Benedikt Vogel would be willing to continue writing articles for the new portal and that Marc Türler as new EPPCN representative could also contribute to the portal with articles on CERN-related news. Beck ends with a last slide on the 2015 Masterclasses in Bern and Zurich, which attracted ~70 students (and teachers) for training on ATLAS and CMS data analysis and hopes for a broader geographic coverage in 2016. The Chair explains that the proposal of SCNAT for the porting of "particlephysics.ch" was discussed in the EB with the opinion that CHIPP should accept this offer and submit a proposal for additional funding. Malte Hildebrandt was not so impressed by the itinerant exhibition for the 200-years of SCNAT and therefore thinks CHIPP should keep the full control on the content. As there was no other comment or objection, the Chair concludes that the Board is agreeing to move forward with the SCNAT proposal.

→ Beck: to submit a funding proposal to SCNAT related to the move of "particlephysics.ch"

12. RECFA news and country visit 2016 (→ slides)

The Chair invites Lenny Rivkin to present an update on the activities of the European Committee for Future Accelerators (ECFA), as requested at the last Board meeting. Rivkin points out that the country visit of Switzerland by the restricted ECFA (RECFA) committee is now confirmed to be on the 1st of April 2016 at the ETHZ with the presence of the State Secretary Mauro Dell'Ambrogio. Such a visit takes place every 7 years and was held last time at EPFL on 6 March 2009. Rivkin shows the programme of this event for information and also the agenda of the upcoming Plenary ECFA meeting to be held on 19–20 November 2015. He then presents some recent ICFA activities. Concerning the high-energy frontier, he presents a list of items summarising on-going discussions by the Advisory Panel of the International Linear Collider (ILC). He finishes by announcing the Future Circular Collider (FCC) week to be held in Rome on 11–15 April 2016.

13. Zuoz Summer School 2016

Adrian Signer presents a slide on the next Zuoz Summer School called "Exothiggs" to be held, as usual, at the Lyceum Alpinum of Zuoz on 14–20 August 2016. He refers to the action from Board 2014-02 item 8 requesting to announce the school earlier, to enlarge the Advisory Committee and to be clearer about the targeted audience. He shows that all of this is now done. He points out the quality of the speakers, which are all 1st choice lecturers. Board members will thus have no excuse anymore to not send their students to attend.

14. SWHEPPS 2016

As Rainer Wallny had to leave before the end of this long meeting, the Chair presents the slide on the Strategy Workshop on High-Energy Particle Physics in Switzerland (SWHEPPS), which will be held at the Seminarhotel am Aegerisee on 8–10 June 2016. He asks the Board to take note of the date. A first organisational meeting in November shall discuss the idea to include the low-energy physics part to have a workshop covering all of Pillar 1. SWHEPPS could then be a first step towards the preparation of a White Paper for Pillar 1 science.

15. 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. There is none of them.

16. Next CHIPP Plenary and Board meetings

The Chair proposes the week of 22–26 February 2016 for the next Board meeting, with preference for Tuesday or Friday. An opinion poll shall set the date³. There could be a short Board meeting at ETHZ on 1st

² http://www.zambo.ch/Start/TV-Radio/Rosanna-checkt-s/Woraus-besteht-die-Welt

³ The opinion poll resulted in a clear preference for Friday, 26 February 2016 at 13:15.

April in parallel to the closed session of the RECFA meeting. A full Board meeting is foreseen on Monday, 22 August 2016 just before the start of the joint SPS/CHIPP Annual meeting to be held in Lugano on 23–25 August 2016.

→ Admin.: to prepare a Doodle poll to fix the date of Board 2016-01

17. A.O.B.

Alain Blondel mentions an issue at PSI concerning the development of experiments with external funding. He suggests discussing at the next Board meeting the low-energy pillar science and how to get this funded. Christoph Grab agrees that this is a good idea. Although the meeting is getting late, Marc Türler wishes to read the words provided by Tatsuya Nakada, the new incoming Chair, for the farewell of Olivier Schneider finishing is two-year term as CHIPP Chair. Nakada points out the remarkable work done by the Chair despite many other obligations and his determination to be fair and impartial. He expresses his gratitude on behalf of the CHIPP members and thanks Schneider by offering him two bottles of wine as a farewell present. The Chair thanks and concludes by saying that he enjoyed working in the EB with his colleagues who shared part of the workload. He also thanks the Administrator for the support over the years and wishes good luck to Nakada for a smooth continuation of the EB work.

The Chair closes the meeting at 17:15.

28 December 2015

written by: Marc Türler

approved by: Olivier Schneider