

Minutes of the Board meeting 2011-03 on 1/2 September rev.1

Place of the meeting: Leysin (Classic Hotel Mercure)
Date and time: Part I: 1 September 2011, 17.40-19.10h
Part II: 2 September 2011, 14.20-16.00h

The Chair opens the meeting at 18.05h.

([→ complete set of slides](#))

1. Agenda

The agenda is approved.

2. Apologies and Proxy votes

The Board agrees to the Chair's suggestion to invite Teresa Montaruli as a guest to the session (according to Art. 22.3 of the CHIPP Statutes); she will take up her duties as full professor at Geneva on 1 October 2011.

Active Board members (as of 1 Sept 2011): 46

Active Board members present: Baudis, Beck, Blondel, Clark, Colangelo, Courvoisier, Dissertori, Ereditato, Grab, Iacobucci, Kirch, Nakada, Neronov, Pauss, Pohl (Chair), Ribordy, Ritt, Rivkin, Rubbia, Shaposhnikov, Spira, Straumann, Wallny, Weber

Other participants: Bourquin (HM), Minkowski (HM), Montaruli (Guest), Moor (Obs.), Ruder (Admin.), Steinacher (Obs.)

The Chair informs about the apologies received and reads out the list of proxy votes as announced before the meeting¹.

Quorum: 16 votes (= 1/3 of the Board members; Art. 24.1 Statutes); Votes present: 25 + 6 proxies = 31

→ The quorum is reached.

3. Minutes of the last meeting (2011-02, 11 April 2011)

The minutes are approved (with thanks to the minute writer).

4. Elections and Re-elections ([→slide](#)): CHIPP EB and CHIPP Chairman

The Chair refers to the [document](#) distributed ahead of the meeting, where the need for electing two new members and for designating a new Chair is explained. He continues by saying that two out of the four names nominated by the Board were not available for election and confirms the availability of the two other candidates (Colangelo, BE; Schneider, EPFL). Colangelo presents himself to Board. The Chair underlines the fact that he is pleased with the proposed candidates and that he especially welcomes the presence of a theorist candidate. A secret vote is not requested.

The Board

- unanimously elects Olivier Schneider and Gilberto Colangelo as new EB members for the period 1 January 2012 – 31 December 2013; and
- unanimously elects Klaus Kirch as new CHIPP Chairman for the period 1 January 2012 – 31 December 2013.

The newly elected persons are welcomed back to the room with applause.

¹ Nakada (for *Schneider*), Straumann (for *Gehrmann*), Ribordy (for *Bay*), Dissertori (for *Chiochia*), Ritt (for *Horisberger*), Colangelo (for *Becher*).

5. Request for Honorary Membership (→ slide)

The Chair refers to the [document](#), which has been distributed ahead of the meeting, in which the six requests are explained. He reminds the Board that a recommendation is requested; the approval will be made by the Plenary. He underlines the fact that the six persons have sent in a request for Honorary Membership and that this category is open for all CHIPP Members that have retired from the active professional life or have acquired the status of Professor emeritus.

In the ensuing discussion, several Members express their reticence to admit persons who have very rarely or never shown up in the Board. In addition, a concern is voiced about the presence of retired Members in strategic discussions.

The Board takes note that the applications fulfil the statutory requirements for Honorary Membership and unanimously (with 9 abstentions) recommends to the Plenary the admission of the six applicants.

6. 'Swiss Centre for Advanced Studies in Particle Physics in the LHC Era':

Request for the period 2013-2016 (slides)

a. Status report regarding the SUK request

The Chair reports about the CRUS discussion and its negative decision wrt the C15 and informs about the advice he has received from the UniGE's rector to submit a NCCR request instead.

b. The alternative way forward

The Chair presents the NCCR 'Particle Universe' [sketch proposal](#), which has been distributed ahead of the meeting. In his opinion, the 5 MCHF class of NCCR's requires the inclusion of all pillars; limiting the request to LHC physics (like to C15) would not be credible. He highlights his line of thinking of linking the three pillars 'high energy and precision physics', 'neutrino physics', and 'astroparticle physics' plus 'accelerator physics' with four transversal focal points (theory, detector technology, analysis methodology, and education). He concludes by underlining the fact that although the chances of success of a NCCR in particle physics are rather small (due to the high number of projects possibly submitted), it remains the only chance for CHIPP to get possibly additional funds to continue – among others – with the very successful activities of the C15, which will end in 2012. The Chair could think of a split lead between UniGE and PSI, with the CHIPP Board acting as Governing Board for the NCCR.

c. Sketch for a NCCR: discussion

In the ensuing discussion, the following elements are mentioned:

- What is the strategic importance of such an NCCR (Ereditato, Pauss)?
- What is the added value? What will we be able to do what we do not do yet (Wallny)?
- The part on cosmology and astrophysics should be more and better developed. The project should be merged with the planned NCCR on cosmology from UniGE. In addition, the part on dark energy should be specified more and better developed (Courvoisier, Shaposhnikov).
- CHIPP has strong activities in all pillars; our weak points are the transversal activities. In an NCCR, these transversal elements are probably THE important and strategic elements. In addition, transversal activities rarely get project money (Nakada).
- Another weak point is the fact that very few Swiss do research at PSI; this should definitely be improved (Blondel).
- Do we have industrial partners, which is an important element for the evaluators (Clark)? *Answer: not for the time being.* This is contested by Kirch, explaining that we do have successful spin-offs and industrial partners. Clark replies that in his opinion, the proposal should be much more focussed on collaboration with industry as partners and not just mention spin-offs.
- What about the requested support from the leading house (Dissertori)? *The Chair confirms this necessity and underlines the need for a support letter from all participating institutes/universities at a later stage.*
- A NCCR with such a broad content looks almost like a wish-list and will most probably have no chance of succeeding (Ereditato).
- The only way of getting more science out of the running experiments is to have more people doing analysis; we have seen this with the C15 project (Pohl).
- What would we do with so many PhDs and PostDocs? *Kirch: many go to industry.* Do we have statistic

- data regarding today's situation (Courvoisier)? If not, we should collect such data (Pauss).
- An important element would certainly be PhD schools and discussions between researchers (Montaruli).
 - The funding limit is probably at around 5 MCH. The present distribution of funds (~50% to LHC, ~25% each to neutrino and astroparticle physics) should probably be maintained with a split of 30:70 between manpower and investment (Pohl). *This is contested by Straumann* mentioning that according to his experience, the funding problems at present are more with manpower than with investment.
 - We should first do a brainstorming session with the proposers of the cosmology NCCR at UniGE (Pauss). The cosmology people at UniGE already have written text which could be merged to the particle physics part (Courvoisier). The Chairs calls for support in trying to convince the cosmology community to join forces. Courvoisier, Montaruli are ready to help.

The Chair invites the Board to continue bilateral discussions over dinner and during the following morning and adjourns the meeting at 19.30h.

The Chair opens the meeting again at 14.20h on the following day, and presents a new and different approach: the NCCR 'Particle Universe' would no longer contain the 'funding line approach', but be built around the transversal focal points. In addition, it must mandatorily include the cosmology NCCR, which is grouped around the EUCLID project. He volunteers to start negotiations with the theory at UniGE. In a 'tour de table' the vast majority of Board Members agree with this new approach. A number of suggestions are forwarded regarding the horizontal elements as well as the fringe benefits (see two lists below). In addition the following points are made:

- flavour physics should be added. (Colangelo)
- fear of being too broad; chances would be higher if focused (Colangelo); not credible if so many themes (Nakada).
- extremely tight timescale (Iacobucci, Rivkin).
- include multimessenger approach (Montaruli).
- danger of deviating from the Roadmap, which is tightly associated with CHIPP (Bourquin). *Contested by the Chair.*
- probably a good way to structure the Swiss community (Bourquin).
- good idea but concrete way still unclear (Kirch).
- positive approach because starting from basic questions; the phenomenology centre needs a lot of care to be (become/remain) self-standing wrt LHC (Spira).
- the horizontal element 'theory' could include theoretical cosmological and deal with questions from and problems with the standard model (Minkowski).
- foresees difficulties to clearly separate horizontal and vertical items, as everything is connected to everything (Straumann).
- danger of compromising FORCE (Beck)? *The Chair confirms that according to his lecture of the call this should not be the case.*
- particle physics is fundamental science, and it should be highlighted that fortunately Switzerland has still the means for doing this type of research (Weber).
- LHC upgrade should explicitly be excluded in the text, because these activities do not constitute a problematic area, but are 'just' a funding problem (Clarke). Exclude also CTA (possibly funded through FLARE) (Nakada); even more general: exclude investments in large research infrastructures and stay science oriented (Pauss). *Agreed.* Use this approach also for the negotiations with cosmology (Kirch).
- as the scientific activities are the core of the NCCR, additional PhD students and PostDocs are needed, but even more so one should increase the intermediate level academic positions at the institutes.
- give justification for the major investments of the Swiss Confederation in Research Infrastructures and distinguish clearly between goals and deliverables. Restrict content to 3-4 horizontal lines and do not talk about specific projects. Names for the horizontal activities should be attractive, and vertical links between the horizontal lines must be introduced. Possibly seek a new name for the NCCR (Ereditato). *The Chair invites all Board Members to come forward with an attractive name for the NCCR.*
- devote some effort and thinking regarding the promotion of young talents and women (Baudis).

Horizontal lines:

- flavour physics (hadronic & leptonic)
- dark matter et al, dark energy =~ observational and theoretical cosmology
- acceleration of particles, incl. cosmic rays

Fringe benefits:

- phenomenology centre
- detectors
- education incl. young talents and women
- outreach
- applications (other sciences, society)

At the end of the brainstorming and discussion, Pauss thanks the Chair for having taken the initiative of suggesting a NCCR and drafting a first sketch.

The Board decides unanimously to provide any possible support and help to the Chair in continuing with the drafting of the NCCR with the goal

- to join forces with cosmology;
- to submit a substantial draft to the rector of the leading house(s) by end October.

→ Chair (supported by Courvoisier, Montaruli, ...): to negotiate in the coming days with the Geneva theory/cosmology community.

→ Chair: to provide a new version of the NCCR text within one week (11 Sept).

→ all Board Members: to provide feedback within the following 7 days (~19 Sept).

→ all Board Members: to contact/inform their vice rector/dean/rector and ask for support.

7. CHIPP Association: Membership fee (→ slides): Proposal for discussion

The Chair refers to the [document](#), which has been distributed ahead of the meeting, and which presents in a certain way the plan B'. He stresses the need to dispose of some funds in order to be able to continue successfully with the CHIPP administration and organisation. According to him, the detailed mechanism remains to be discussed and decided.

In the ensuing discussion, Nakada suggest to include also the RRB in the administrative activities. Colangelo considers the suggested amount for the membership fee (~2.5 kCHF) as too large, and fears that this might pose a problem for the theoretical physicists, who usually have at their disposal only very small budgets. This latter part of the intervention is also supported by Courvoisier. Possibly the problem would be less stringent if the invoice would be addressed to the institutes as a collective bill comprising all Board Members from a given institute (Colangelo). Kirch suggests having a discussion with the individual institutes to see, where problems exist. Rubbia agrees that CHIPP will have to find 120 kCHF in case the NCCR does not materialize; in his eyes, the disagreement voiced concerns just the splitting of this amount. Spira looks at the problem also from a sociological point of view, as theorists up to now very often have been able to work as individual scientists, whereas experimentalists had been forced a long time ago to form collaborations and to join forces. He is of the opinion that with a NCCR, such grouping would also be expected from theory. Ereditato wonders whether one should not also approach foundations for the promotion of science and scientific societies for support in order to reduce the bill for the individual Board Members.

The Board decides with a very large majority (2 votes against)

- to start self-financing the administrative and organisational CHIPP activities;
- to embark on a gradual start with 50% in 2012, 75% in 2013, and 100% from 2014 onwards;
- to send out the bill to either individuals or collectively to the institute (case by case);
- to agree to the rules as set out in the basic document.

→ Chair: to send a letter to each institute inquiring about their preferred mode of receiving the bill, and to come back to the Board in case he encounters difficulties.

8. Report on CHIPP activities (elements not to be reported in the Plenary, (→ slides)

a. FORCE requests (result for 2011; next period)

MP shows the list of the grants received in 2011. Ereditato suggests changing the title from 'requests' to 'grants' in order to avoid misunderstandings. The list and a remark by the Chair triggers a discussion about 'oversubscription' and coherence between the amounts delivered by the project leaders for the CHIPP tables and the FORCE requests.

Steinacher confirms that FORCE will have an unchanged amount of 4.8 MCHF at its disposal for 2012. He explains that the existing budget lines FORCE (CERN), FINES (ESO) and a new budget line FLARE (Funding Large international REsearch projects, former name: FOLIS) will be transferred to the SNF as of 2013 onwards. Taking into account the tight budgetary situation of the Swiss Confederation in the years 2013/14, one cannot expect a substantial increase of the sum of the three budget lines in these years, whereas for the remaining two years of the legislative period (2015/2016) the prospects look much better. FORCE, FINES and FLARE will be part of the 'Leistungsvereinbarung' of SER with SNF, and there is a common understanding to proceed with a FORCE-type 'Lenkungsausschuss' also for the future. The question how far the three budget lines are communicating tubes or not, remains – according to Steinacher – to be defined by the 'Lenkungsausschuss'.

Steinacher concludes by explaining the transfer of the SER from the Federal Department of Home Affairs FDHA to the Federal Department of Economic Affairs FDEA, where the Federal Office for Professional Education and Technology is situated already. This transfer has been decided by the Federal Council and will take effect as of 1 January 2013. Courvoisier offers the help of the Swiss Academy of Natural Sciences SCNAT, in case the position of the basic science within the FDEA will be endangered. The Chair thanks Steinacher and the SER for the continued support and for maintaining a direct communication link with CHIPP.

b. CHIPP tables (update procedure for fall 2011)

The Chair informs that Baudis is again in charge of collecting the data and asks the Board Members to facilitate her work to the extent possible.

c. SER Roadmap (see final version published²)

d. Round Table 'Swiss representation in international bodies and projects' (26 May 2011)

The Chair informs about the meeting (official minutes³) and asks Kirch to invite the PSI director to the ICFA Seminar (the SER has declined to participate).

9. Status of new professorships at CHIPP Institutes: Statements from each of the institutes

The usual 'tour de table' shows the situation at Swiss universities as follows:

- **GE:** Next year the succession of Allan Clark will be tackled. The position will be in accelerator based particle physics, and for budgetary reasons be at associate level.
- **ZH:** The procedure regarding the succession of Claude Amsler is going on; interviews are held now. There will be no other vacancies at the Physik-Institut in the near future.– In theory, the succession of Daniel Wyler (phenomenology & interface) seems to be possible next year already.
- **BE:** The Einstein Centre (experimental and theoretical physics) has published the position of a tenure track assistant professor in experimental astroparticle physics. The deadline for applications is 15 October 2011.– In theoretical physics the new professor replacing Peter Hasenfratz starts next February.
- **ETHZ:** No open position at this time.
- **EPFL:** no open positions at this time.
- **PSI:** The successor of Ansgar Denner has been appointed; discussions are ongoing to create a joint professorship between PSI and University of Zurich.

10. Impressions from the Plenary meeting (programme, meeting place, ...)

A short feedback shows that the scientific programme was considered to be fascinating. However, some of the talks concentrated too much on the work of their institute, whilst others have been too technical. For a conference like this and taking into account the enlarged audience coming from many different fields of research, one should seek to remain at the level of 'overview' or 'CERN courier'. In addition, it was underlined that the supervising professor of the speaker has a responsibility to support and guide the speaker during the preparation of his/ her talk.

Several Board Members suggest having much more time for discussion (after the talks but also during an increased number of coffee breaks). The Board acknowledges that this would be possible by either reducing the number of topics (which would be a pity, as the Plenary serves as National Conference in Particle Physics) or by extending the duration to three days. In view of the fact that in 2012 the European Strategy for Particle Physics might take a certain amount of time at the Plenary, a three day meeting is preferred.

² - http://www.sbf.admin.ch/htm/dokumentation/publikationen/forschung/11.03.30.NFO.RoadmapForschungsinfrastrukturen_d.pdf

³ - http://www.chipp.ch/documents/minutes_RoundTableInternational_2011.pdf

One Board Member suggests not splitting the Board meeting over two days (although this procedure has been extremely helpful this year).

One Board Member considers the way the conference room was set up (Seminarbestuhlung) to not encourage discussions among the participants; an auditorium-type of room would be preferred.

The hotel was judged ok, but visibly the low price (which was an explicit requirement from last year's feedback) showed some draw-backs regarding quality and flexibility.

The Board decides to extend the Plenary session 2013 by one day (as a test bed).

→ Ruder: to extend the duration of the meeting 2012 to a total of three days.

11. Next Board meeting

The two dates suggested in week 3 seem to collide with other meetings already fixed.

The Board decides

- to fix the next Board meeting on 12 January 2012 starting at 14h at ETHZ Hönggerberg;
- to meet around a joint lunch before the meeting; and
- to envisage a possible extraordinary meeting in the end-March timeframe to discuss and decide on the CHIPP input to the European strategy in particle physics.

→ Ruder: to liaise with Kirch regarding the organisation of the meeting and the lunch.

→ Ruder: to dig out the 2005 papers (input SER) for the European strategy in particle physics.

12. Next Plenary meeting

The Board decides to set the Plenary meeting on 12-14 September 2012 in Eastern Switzerland.

→ Ruder: to identify suitable places and to submit the offers to the Chair for decision.

13. A.O.B.

Kirch informs the Board that there had been only 2 applicants for the CHIPP prize. He is convinced that there would have been more potential candidates among the Swiss PhD students and calls on his colleague Board Members to encourage their students to participate. In addition, there have been less than 25% of the Board Members participating in the evaluation of the applicants. He would appreciate to receiving a larger number of feed-backs in 2012.

The Chair closes the meeting at 16.15h.

19 September 2011

written by: Jean-Pierre Ruder

approved by: Martin Pohl