

Results of the Plenary meeting 2015 29 June – 1 July 2015

Place of the meeting: Château de Bossey, ch. Chenevière 2, 1279 Bogis-Bossey

Time of the meeting: 29 June (14:00) – 1 July 2015 (16:00)

The CHIPP Plenary meeting 2015 was held at the Château de Bossey between Nyon and Versoix, from 29 June to 1st July 2015. This three-day event comprised two meetings of the CHIPP Board, the formal Plenary meeting of the CHIPP association, the award ceremony of the 2015 CHIPP Prize to the best PhD student, as well as eight 90-minute topical sessions with scientific presentations by CHIPP members or invited speakers. This edition featured three sessions on LHC and low-energy physics, two special sessions on Technology Transfer, one session on future accelerator-based facilities or experiments, and two sessions on astroparticle and neutrino physics.

The conference programme and the individual talks can be found at <https://indico.cern.ch/event/384436/>

This document is not meant as abstract or summary of the individual talks, but limits itself to a summary of the formal CHIPP Plenary and the CHIPP Prize award.

1. CHIPP Prize award

The CHIPP Prize for the best PhD student in experimental or theoretical particle physics is awarded for the eighth time. This year, the CHIPP Selection Committee decided to award the prize to **Lilian Witthauer** from the University of Basel for her dissertation (in preparation) on the η -photoproduction off quasi-free nucleons. The laudatio says: “For her comprehensive study of photoproduction of η -mesons on nucleons bound in deuterium and ^3He with polarized beams and targets, which covered all aspects from data-taking with two different experimental set-ups at two medium energy electron accelerators to detector calibration and a challenging analysis”.

The award ceremony was held on Monday 29 June at 17:30 and was followed by the Prize talk, where the winner presented her current research activities¹. An aperitif was enjoyed afterwards on the terrace.

2. Formal CHIPP Plenary meeting

The formal CHIPP Plenary meeting was held on Wednesday, 1st July 2015, 9:00 – 10:30.

2.1. Welcome, news from CHIPP Board and Executive Board

In his opening presentation², the CHIPP Chair, Olivier Schneider, reminds the current composition of the Executive Board and announces the election – at the Board meeting of Monday, 29 June – of Tatsuya Nakada as the next Chair from January 2016 to December 2017. He mentions also the other elections and mandates related to CHIPP since last year's Plenary. The Chair then presents the recent CHIPP meetings and activities, in particular the CHIPP PhD Winter School held in Grindelwald the week of 18–23 January 2015. He continues with the future activities, in particular the organisation in 2016 of the RECFA country visit of Switzerland, the PSI Zuzo Summer School and a Strategic Workshop on High-Energy Particle Physics in Switzerland (SWHEPPS). He finishes with the announcement of the next CHIPP Annual Plenary, which will be joint with the Swiss Physical Society – as in 2014 – and held in Lugano, on 23–25 August 2016.

2.2. Election of Swiss representatives in ECFA

The Chair introduces the topic by reminding that the election of Swiss representatives in the European Committee for Future Accelerators (ECFA) belongs to the CHIPP Plenary, based on a recommendation by

¹ <https://indico.cern.ch/event/384436/session/2/contribution/23/material/slides/0.pdf>

² <https://indico.cern.ch/event/384436/session/5/contribution/35/material/slides/0.pdf>

the Board. He presents the four current Swiss representatives in ECFA and the recommendation of the Board to re-elect Lenny Rivkin for a 2nd three-year term as Restricted ECFA and Plenary ECFA representative and to re-elect Olaf Steinkamp also for a 2nd term as Plenary ECFA representative. He then explains that two candidates have been nominated and are ready to serve as new Plenary ECFA members, succeeding to Terence Garvey, who cannot be re-elected for a 3rd term. These two persons are Domenico della Volpe (UniGE) and Andreas Knecht (PSI). The latter gives an oral statement, while Teresa Montaruli presents a slide with a statement and a picture of the former, who could not be present because of a bicycle accident a few days ago.

The Plenary – in open vote and with unanimity but two abstentions – re-elects Lenny Rivkin (PSI & EPFL) for a 2nd three-year term (Jan. 2016 – Dec. 2018) as Restricted ECFA representative and Plenary ECFA representative.

The Plenary – in open vote and with unanimity but one abstention – re-elects Olaf Steinkamp (UZH) for a 2nd term (Jan. 2016 – Dec. 2018) as Plenary ECFA representative.

The Plenary – in secret vote with 24 votes versus 14 votes for della Volpe – elects Andreas Knecht (PSI) for a 1st three-year term (Jan. 2016 – Dec. 2018) as Plenary ECFA representative.

→ CHIPP will inform the ECFA Chair about these re-elections and new election.

2.3. Admission of new CHIPP Honorary Members

The Chair reminds that, according to the Statutes, Honorary Membership is open to CHIPP Members who have retired from their active professional life or have acquired the status of Professor emeritus. He then presents the five new requests received this year and proceeds with the vote.

The Plenary – in open vote and with unanimity – approves the admission of one Honorary Board Member (Daniel Wyler) and of four Honorary Plenary Members (Ralph Eichler, Divic Rapin, Jean-Pierre Ruder, and Dirk Trautmann).

2.4. CHIPP Computing Board report

Christoph Grab, the Chair of the CHIPP Computing Board, presents the status of operation of Swiss LHC computing within the Worldwide LHC Computing Grid (WLCG)³. He reminds that Switzerland operates a Tier-2 regional centre at the Swiss National Supercomputing Centre (CSCS) in Lugano serving all three experiments with Swiss participation: ATLAS, CMS and LHCb. The funding of the CSCS Tier-2 is secured for the period 2013-2018 and represents ~2–4% of the WLCG. It is supplemented by dedicated ATLAS Tier-2 resources at the AEC-UniBE and by indispensable, local Tier-3 clusters at EPFL, PSI, UniBE, UniGE and UZH. The Swiss network is assured by Switch, which takes good care. Grab also presents various plots on the cluster performance (>95% availability and 85–95% efficiency), the steady increase of the resources despite a flat budget, the resources usage and the data popularity per experiment. Giuseppe Iacobucci thanks Grab for all the excellent coordination work done in the Computing Board.

2.5. CHIPP Outreach Board report

Hans Peter Beck, the Chair of the CHIPP Outreach Group, limits himself to CHIPP activities⁴, as he cannot cover the many outreach activities pursued by all groups at various scales, which constitute quite a wealth of activities targeted to high school students, teachers and the public. He mentions the Master Classes 2015, a contest for some 10'000 high-school students worldwide, who become particle physicists at a nearby institute for a day. In Switzerland, Zurich (UZH & ETHZ) and Bern are participating, while Geneva benefits from the activities offered at CERN and EPFL could start activities for LHCb. He then reminds the 'Interactions' outreach project founded through SNSF-Agora, SERI and SCNAT, which benefitted from ~100 kCHF/year over the last three years. The activities are reported on the multi-lingual 'particlephysics.ch' website built-up from the huge public interest generated by the Higgs discovery, but is now coming to an end, unless there is a major innovative new idea or a new discovery to justify on-going funding. Beck ends his presentation with the SCNAT bicentennial celebration, which has been de-scoped from the initial plans to become a less ambitious 'Research Live' tour of Switzerland with a small exhibition and local activities. CHIPP was granted a continuation of the SNSF-Agora funding of ~29 kCHF to participate to this celebration by screening the movie

³ <https://indico.cern.ch/event/384436/session/5/contribution/38/material/slides/0.pdf>

⁴ <https://indico.cern.ch/event/384436/session/5/contribution/39/material/slides/1.pdf>

'Particle Fever' (USA, 2013) in Open Air cinemas in Lucerne (9 August) and Aarau (23 August), and also in a high-school in Sion (25 September). The latter will be followed by an inter-disciplinary podium discussion with Olivier Schneider among others. A further bicentennial-related event this autumn could be a 20-minute reportage at CERN for the program "Rosanna check's" on Swiss German TV.

2.6. CERN Council report

The Chair in his function as Swiss scientific CERN Council delegate reminds in his report⁵ the members of the Swiss delegation, the appointment of Fabiola Gianotti as the CERN DG for the period 2016–2020 and, among other elections, the re-appointment of Frederick Bordry as director of Accelerator and Technology until July 2019. He mentions the submission in March 2015 of an HL-LHC proposal for inclusion in the 2016 update of the ESFRI roadmap. The approval process of the Phase-2 upgrades of ATLAS and CMS is on-going with the elaboration of the "scoping" document comparing the physics performance under three cost scenarios (200, 235, and 275 MCHF per experiment) and with the preliminary funding matrix expected in fall. The Chair then presents the main features of the latest draft Mid-Term Plan 2016–2020, which results in a significant reduction of the peak of CERN's cumulative budget deficit from 540 MCHF to below 400 MCHF. The updated LHC schedule has an extended Long Shutdown 2 in 2019–2020 to accommodate new excavations for the cryogenic plant extension. He finishes with news on the CERN enlargement process, in particular the accession of Turkey on 6 May 2015 as an Associate member state.

2.7. Advisory Committee of CERN Users (ACCU) report

Michael Dittmar, the new Swiss ACCU representative, reminds in his report⁶ that there are yearly four ACCU meetings. Although the aim of ACCU is a channel between the Director General and the community of users, he notes that it is mostly a one way road, in the sense that the CERN directorate informs the users through this channel. He then requests help to update obsolete contact information of various team leaders from Swiss institutes. Antonio Ereditato and Giuseppe Iacobucci say that they – as department leader – can solve this very easily. He ends by asking for issues to be brought up at the next meetings and announces that he will continue to distribute informal notes and the links to the official minutes of the ACCU meetings to the Swiss users of CERN.

2.8. European Committee for Future Accelerators (ECFA) report

Lenny Rivkin, the Swiss Restricted ECFA representative, reports⁷ on the very efficient and interesting ECFA HL-LHC Workshop held on 21–23 Oct. 2014 in Aix-les-Bains, followed on 27–30 Oct. 2014 by the 11th ICFA Seminar on Future Perspectives in High-Energy Physics held in Beijing. He also mentions the Danube School held on 8–13 Sept. 2014 in Serbia on instrumentation in elementary particle and nuclear physics. He shows the list of past ECFA meetings before presenting the programme of the joint ECFA-EPS session to be held in Vienna on 25 July 2015. He then announces that in early 2016, there will be a R-ECFA country visit of Switzerland – as every 7 years – to be held at ETHZ. He finishes with news on the election of Halina Abramowicz (Tel Aviv Univ.) as ECFA Chair and the release of the Joint ECFA/HEPP-EPS Memorandum on the evaluation of Experimental Particle Physicists.

2.9. Astroparticle Physics European Consortium (ApPEC) report

Teresa Montaruli, the Swiss ApPEC representative, informs⁸ on the various ApPEC-related meetings held in 2015. She then points out the ApPEC press release on the outcome of the 2nd International Meeting on Large Neutrino Infrastructures hosted at Fermilab on 20–21 April 2015. Besides other news from the General Assembly, she mentions the new ATTRACT pan-European initiative for funding R&D on imaging and radiation sensors involving EU research infrastructures, as well as small and medium enterprises. Montaruli then advertises the opportunity of common call proposals and presents the strategy towards the new ApPEC Roadmap (2016–2020) to be prepared this fall and distributed by the end of the year. It will include three major areas: a) multi-messenger study of the high-energy universe, b) neutrino properties and c) the dark side of the universe and the CMB. She finishes by presenting the H2020 activities by ApPEC, which have not been very successful so far, except for the approval of funding for the Astronomy ESFRI and Research Infrastructure Cluster (ASTERICS) and for CTA site preparation.

⁵ <https://indico.cern.ch/event/384436/session/5/contribution/40/material/slides/0.pdf>

⁶ <https://indico.cern.ch/event/384436/session/5/contribution/41/material/slides/0.pdf>

⁷ <https://indico.cern.ch/event/384436/session/5/contribution/42/material/slides/1.pdf>

⁸ <https://indico.cern.ch/event/384436/session/5/contribution/43/material/slides/0.pdf>

2.10. Express reports on NuPECC and SPS

Bernd Krusche, the Swiss representative of the Nuclear Physics European Collaboration Committee (NuPECC), informs⁹ the Plenary that the uncertainty concerning the future NuPECC relation with the European Science Foundation (ESF) is likely to get solved with an ESF successor organisation, which could start in 2016. He mentions also the new NuPECC long-range plan to be finalised by early 2017. People interested in joining one of the forming working groups (e.g. on fundamental interactions or medical applications) should contact him. He finishes by mentioning the issue that Switzerland pays no collaboration fees, while Swiss groups are organising meetings at the European Centre for Theoretical studies in Nuclear Physics and Related Areas (ETC*) located in Trento, Italy.

Andreas Schopper, the observer of the Swiss Physical Society (SPS) in CHIPP, concludes the Plenary by giving a short overview¹⁰ of the SPS profile and its recent activities and projects. He reminds that, as in 2014, the SPS Annual Meeting of 2016 will be held jointly with CHIPP in Ticino on 23–25 August 2016.

7 September 2015

written by: Marc Türler

approved by: Olivier Schneider

⁹ <https://indico.cern.ch/event/384436/session/5/contribution/44/0/material/slides/0.pdf>

¹⁰ <https://indico.cern.ch/event/384436/session/5/contribution/44/1/material/slides/0.pdf>