

CHIPP Association – a short history

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Coordination in Swiss High Energy Physics dates back to 1974 when high energy physicists involved in CERN experiments decided to organize regular meetings to present and discuss their research projects. The Forum of Swiss High Energy Physicists was then founded in 1988 by the “Sous-commission de physique nucléaire et corpusculaire” of the “3^{ème} Cycle de la Physique en Suisse Romande”, with the purpose of coordinating large projects at CERN. This body was instrumental in the coordination of Swiss research at the Large Electron Positron Collider LEP, in advising the Swiss authorities on a participation in the Large Hadron Collider LHC programme and, more recently, on the FORCE programme (Fonds pour la recherche au CERN). Initially restricted to universities in the Romandie, it was soon extended to all Swiss groups working in particle and nuclear physics. Physicists holding a PhD working in these fields for a Swiss Institution, and Swiss nationals employed by CERN, were members of the Forum which met once a year to elect its representatives to international committees like ECFA and to discuss items of common interest. However, this body had neither an official mandate nor any decision power, nor was it supported by even a minimum infrastructure such as a secretariat. Financial support for participating in national and international coordination activities (for instance promotion of particle physics in the schools and media) was also not available.

Following a ‘suggestion’ of the Swiss State Secretary for Science and Research, Charles Kleiber, the Forum of Swiss High Energy Physicists decided at its annual session on 22 June 2002 at CERN – under the guidance of its then chairman Prof. Claude Amsler – to transform itself into something more ambitious, aiming at coordinating the participation of Swiss physicists in international research projects in particle, astroparticle and nuclear physics, ensuring an optimum use of resources, and promoting the education and public awareness in these fields at the national level.

The creation of a national institute (or a scientific council) for experimental particle physics and astroparticle physics was also recommended by the Committee for Future Accelerators (ECFA) whose restricted panel (RECFA) evaluated particle physics in Switzerland during its visit at the University of Zurich on 1-2 March 2002.

Several informal discussions had already taken place over the years, culminating in a more detailed proposal from the “Arbeitsgruppe Teilchenphysik” of the ETH-Council¹ for creating a virtual Swiss institute for particle and astroparticle physics with the following purpose:

To strengthen particle, astroparticle and nuclear physics in Switzerland by being active in particular in the following fields:

- a. To help towards a successful participation of Swiss groups in projects;
- b. To advise the Universities/ETHs on vacant professorships and academic strategies, and coordinate teaching activities;
- c. To ensure a proper Swiss representation in relevant national and international bodies;
- d. To promote public awareness on particle, astroparticle and nuclear physics.

A draft constitution for the new institute was established between October 2002 and June 2003 and

¹ Vorschlag zur Errichtung eines virtuellen Schweizerischen Instituts für Teilchen- und Astroteilchenphysik, 25. Juni 2002.

approved by the Forum on 2-3 October 2003². Through the State Secretary for Science and Research, it was distributed further to the Bundesamt für Bildung und Wissenschaft BBW/OFES, the ETH-Rat, the Schweizerische Universitätskonferenz SUK/CUS, the Presidents of ETHZ and EPFL, the Director of PSI, the University Rectors and the Swiss National Science Foundation SNSF for information.

The first Chairman of the Swiss Institute for Particle Physics CHIPP – Prof. Allan Clark – set up the detailed organization for the daily work of the institute, created the tools for the funding dialogue with the State Secretariat for Education and Research SER and brought the whole system to life. As a first major task, a Roadmap entitled ‘Particle Physics in Switzerland – Status and Outlook of Research and Education’³ was established, approved by the CHIPP Board in February 2004 and published with the assistance of PSI (CHIPP did not dispose of a budget). At that time, CHIPP was working without a permanent secretariat and depended on the good will of its Chair and the secretarial staff of his institute.

A fundamental change was possible from 2008 onwards: In reply to the SUK call for ‘Innovations- und Kooperationsprojekte 2008-2011’ in October 2006, CHIPP submitted a project called ‘Swiss Centre of Advanced Studies in Particle Physics in the LHC Era’⁴, which was approved in October 2007. This Swiss-wide project brings together the Universities of Berne, Geneva and Zurich as well as the two ETHs and puts 3.3 MCHF at the disposal of the Swiss experimental and theoretical Particle Physics community. It has been developed with the aim of strengthening the cooperation of the Swiss partners for the analysis of the LHC data and its physics interpretation. It was motivated by the need to validate a large multi-year investment of almost 600 MCHF made by the Swiss Confederation, the Cantons and the physics institutes by supporting the construction of the LHC and its detectors at CERN. The goals are (1) the development of a Centre of Excellence in high energy collider physics, (2) the support of academic tasks like PhD education (taken over by the SNF ProDoc programme before the start of the project), (3) the coordination of inter-institutional cooperation among the institutes concerned and (4) the modernization of research and teaching, all with the overriding aim of maintaining a high quality of education for graduate and postgraduate students in a cost efficient way. The funding received allowed nine scholarships for PostDocs of highest international reputation and a par-time administrative assistance supporting the project leader.

Since 2003, CHIPP has developed a stable organisation with regular meetings of the Executive Board, the Board and the Plenary meeting and a healthy scientific life with two to three topical workshops per year as well as a ‘School of Particle Physics’. Further, support to workshops, conferences and schools organised in closely related fields has been given. Major other tasks are the regular update of the monitoring framework for resources and funding – long-term financial estimates called ‘CHIPP tables’ put annually at the disposal of the SER as a useful planning tool – and the joint FORCE requests for Maintenance and Operation of the LHC, and for the funding for the Computing GRID.

In 2010, CHIPP undertook to transform itself into a not-for-profit Association – a prerequisite to apply for membership of the SCNAT. The decision of principle for this transformation had been taken on 23 August 2010 at the CHIPP Board meeting in Gersau (SZ), whereas the statutes and bylaws entered into force on 26 January 2011, the day of the official ‘Gründungsversammlung’ required by Swiss law. This step is a milestone in CHIPP’s history, since it allows the Association to conclude employment contracts and sign other legal documents. On 20 May 2011, the Delegate Assembly of the SCNAT welcomed CHIPP unanimously as a new member as of 1st January 2012.

² see http://www.chipp.ch/documents/CHIPP_constitution.pdf

³ see: <http://www.chipp.ch/documents/roadmap.pdf>

⁴ Project proposal: http://www.chipp.ch/documents/Gesuch_C15_20070617_final.pdf