

 <p>17 December 2004</p>	<p>Summary, <b>CHIPP</b> Executive Board</p>	<p>Meeting 7 23 November 2004 ETHZ</p>	<p>A. G. Clark J-P. Derendinger A. Rubbia</p>
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## Agenda

1. Presentation and Visit of ETHZ Activities
2. Approval of Summary of CHIPP EB meeting 6
3. Items arising
4. Follow-up of the CUS Request for a CHIPP Doctoral School
5. Follow-up of the CHIPP Computing
6. Preparation of M&O requirements for LHC experiments
7. Future Meetings
8. Divers

### 1. Presentation and Visit of ETHZ Activities.

Present from ETHZ: G. Dissertori, R. Eichler, M. Jongmanns, U. Langenegger, F. Pauss, A. Rubbia, M. Suter

- a) Felicitas Pauss introduced the meeting. She explained the history of the institute and the current activities. Ongoing activities include:
  - the group of R. Eichler: the H1 experiment at HERA;
  - the group of F. Pauss: the CMS experiment at the CERN LHC (F. Pauss, G. Dissertori, U. Langenegger), the AMS experiment (H. Hofer with G. Viertel), the MAGIC  $\eta$ -ray experiment (F. Pauss);
  - the group of A. Rubbia: the ICARUS experiment, the ArDM experiment, the possible use of LAr detectors at the T2K, R&D towards a next-generation LAr TPC, and a positronium experiment;
  - the group of M. Suter (Ion Beam Physics)
- b) Currently Felicitas Pauss is Director of the Institute, with André Rubbia her Deputy. The institute currently totals 62 academic staff (CHIPP members), including 26 graduate students.
- c) Items discussed included
  - the close working relation between PSI and ETHZ;
  - concerns with respect to funding for LHC experiments and in particular CMS;
  - European funding for accelerator research, in particular CARE where the EUROTEV project had been granted 9M€ from the EU;
  - Possible future European funding opportunities, in the 7<sup>th</sup> Framework where fundamental research activities were accepted (a call for proposals had been made by Bern);

- teaching activities, including those in Nuclear Physics where there was coordination with the University of Basle;
  - the rejected initiative for a CHIPP graduate school to CUS/SUK (see below).
  - Felicitas Pauss introduced the meeting. She explained the history of the institute and the current activities. Ongoing activities include:
  - the group of R. Eichler: the H1 experiment at HERA
- d) A visit was made to the Institute activities at ETHZ (it was stressed that most activities were at CERN, DESY and PSI). Of particular note were
- the outstanding clean room facilities available for fabrication of large detectors (e.g. silicon trackers) in clean room conditions;
  - the first on-line results of cosmic ray tracking using a LAr TPC within a magnetic field;
  - the extensive Tandem facilities in use by the group of M. Suter for Ion Beam research and applications, and in addition the development of small low-cost facilities suitable for University laboratories.
- e) Günter Dissertori and Felicitas Pauss emphasized the important 150<sup>th</sup> Anniversary of ETHZ in 2005; together with the International Year of Physics in 2005, this would be a major opportunity (and load). In particular, Günter and Christoph Grab would be heavily involved in local Outreach activities.
- f) Felicitas Pauss and André Rubbia noted that a 1<sup>st</sup> draft of a Science Program for the funding period 2008-11 had been requested by ETH. This was relevant for both the funding of facilities such as CSCS Manno, and the funding of the CHIPP scientific programme.

Following extensive informal discussions, the visit was concluded. The CHIPP EB thanked the members of ETHZ for their hospitality. This was followed by a synthesis of the visit by the CHIPP EB.

## **2. Approval of CR of Meeting 6.**

The summary was agreed minor changes.

## **3. Items arising and Communications.**

Items arising included a discussion of the proposed CHIPP Graduate School (together with the ETHZ hosts) and the CHIPP Computing for LHC (including the ETHZ hosts and Christoph Grab). These issues are noted as separate items in this summary.

## **4. Follow-up of the CUS Request for a CHIPP Doctoral School (open discussion).**

As reported in the Summary of EB Meeting 6, the CUS/SUK request for the funding of CHIPP Doctoral School activities was rejected. There was a post-mortem on this decision, followed by a discussion on possible future actions.

- a) There should be a renewed CUS/SUK and ETH request in due course, but there was a sentiment that this would only be successful if built on other near-term initiatives.
- b) We should make a short document of the courses and other activities that should be taught in this School. In particular, given an initiative for a joint ETHZ-UniZh Graduate School, and expected changes to the 3<sup>ième</sup> Cycle involving UniGe, EPFL, UniFr and UniNe in the light of the future Master-PhD cursus, it would be important to ensure that these different initiatives were coordinated.
- c) It was suggested that the bi-annual Zuoz Summer School organized by PSI may serve as the basis of the proposed annual Summer School for graduate students in Switzerland. It was agreed that this should be discussed with PSI. It was nevertheless stressed that the international character of the existing rather advanced Zuoz School should not be under-mined, and it was stressed that the CERN – coordinated European Summer School should be fully supported.

## **5. Follow-up of the CHIPP Computing (open discussion).**

Christoph Grab explained the status of the Price Enquiry with several vendors for the first step towards a CHIPP Tier 2 Computing Infrastructure for LHC experiments at CSCS Manno. At least 2 of the submitted offers fitted well with the September 2004 FORCE allocation of 127 KCHF for LHC computing activities, and with the planned technical specification. Christoph added that enormous stress would be put on demonstrating the infrastructure for reliable long-term GRID operation. Details of the offers were being discussed prior to a final decision.

Christoph added that A. Clark had requested the CHIPP Computing Board to develop a detailed planning of the required resources until and including LHC turn-on in 2007. This would be one necessary element for future funding requests. A draft version existed and would be updated as necessary. Christoph noted that the LHC experiments and CERN were themselves undertaking a review of the required resources, and that the requirements would be known subsequent to that study.

R. Eichler expressed support for the CSCS Manno effort, and added that PSI was making a strong commitment towards computing resources there.

The CHIPP EB requested to Christoph that the CHIPP Computing Board should contact each Swiss Institute involved with LHC, and to arrange during the first part of 2005 a 2-day Workshop on Physics and Computing at LHC. This was agreed.

## **6. Preparation of M&O requirements for LHC experiments**

There was extensive discussion on the future M&O requirements within Switzerland for the LHC experiments, and how/whether those requirements might be met. No conclusions or decisions were reached. Subsequent to the meeting, the contents of a

document to be presented and discussed at the CHIPP Board on December 3, 2004 were agreed by majority.

### **7. Future Meetings**

There was no decision on future meetings (note added in proof: see summary of the CHIPP Board of December 3, 2004).

### **7. Divers**

There was no other business and the meeting was concluded.