

Summary Notes of

6th Institute Board Meeting of the CLIC Detector and Physics Study

Held at CERN on 29 January 2015, 12:45 - 14:15

Present at CERN: Konstantin AFANACIEV (**Minsk**, Bielorrussia), Marc BOLAND (Australian Collaboration for Accelerator Science **ACAS**), Phil BURROWS (University of **Oxford**), Konrad ELSENER (**CERN**), Juan FUSTER for Alberto Ruiz (**Spanish Network for Future Linear Colliders**), Joel GOLDSTEIN (University of **Bristol**), Marek IDZIK (**AGH** University of Science and Technology, Cracow), Tomas LASTOVICKA (Institute of Physics, Academy of Sciences, **Prague**), Aharon LEVY (**Tel Aviv** University), Mila PANDUROVIC for Ivanka Bozovic-Jelisavcic (**Vinca** Institute of Nuclear Sciences, Belgrade), Aidan ROBSON (University of **Glasgow**), Frank SIMON (**Max Planck Institut für Physik**, Munich), Mark THOMSON (University of **Cambridge**), Joost VOSSEBELD (University of **Liverpool**)

Also present: Lucie LINSSEN (CERN), CLICdp spokesperson; Philipp ROLOFF (CERN) and Marcel VOS (Valencia) - invited for the discussion on energy staging

Attended via Webex: Titi PREDA (**Institute for Space Science**, Bucharest), Leszek Zawiejski (The Henryk Niewodniczanski Institute of Nuclear Physics, **Polish Academy of Sciences**, Cracow)

Apologies/absences: Marco Aurelio DIAZ GUTIERREZ (Pontifica Universidad Catolica de Chile, **Santiago**), Nigel WATSON (University of **Birmingham**), Harry WEERTS (**Argonne**), James WELLS (University of **Michigan**) Gerald EIGEN (University of **Bergen**) Ulrik UGGERHOJ (**Aarhus** University), Yannis KARYOTAKIS (LAPP **Annecy**)

Link to Meeting (Indico page): <https://indico.cern.ch/event/360000/>

1) Welcome

Frank Simon welcomed everybody to this 6th CLICdp IB meeting.

2) Report from the Spokesperson

Rather than a classical "status report" (which is being given by many participants during the on-going CLIC workshop) Lucie Linszen brought up topics for which a discussion (or decision) in the IB was essential:

a) Choosing a new baseline for CLIC energy staging

As discussed extensively during the Thursday morning session of the CLIC workshop (just before the IB meeting), the question of the first energy stage (in the foreseen CLIC staging) turns out to be a difficult choice between the best for precision Higgs measurements and the best possible top quark cross section and forward-backward asymmetry measurements (in view of searching for New Physics). Given the present knowledge, the IB **concluded** that a c.m. energy of 380 GeV appeared the correct choice. It was, however, agreed that this should not be decided by the IB alone - the topic was therefore put on the agenda of the plenary CLICdp session later in the afternoon.

NB. The discussion in the plenary session concluded with the same 380 GeV. The decision process and conclusion were very clearly explained by Mark Thomson in his talk to the plenary session of the CLIC workshop (accelerator & physics/detectors), see <https://indico.cern.ch/event/336335/session/6/contribution/3/material/slides/0.pdf>

b) CLIC Higgs paper

The first draft of the paper had been discussed on Tuesday in a CLICdp plenary session at the CLIC workshop. Mark Thomson re-iterated that detailed comments on sections 1, 2 and 3 are welcome as of now, whereas only general comments should be made on the rest of the paper (some parts are still missing, due to on-going analysis efforts).

It was **agreed** that, at some later stage, the paper will be put on CDS such that comments can be collected (and kept) in a structured way.

Concerning the author list of this paper, the IB **agreed** that all institutes should be present in the author list (unless they explicitly wish not to be authors). General guidelines (not to be understood as rules!) discussed by the IB were (a) not to include engineers and technicians in the author list, as this paper focuses on physics; (b) not to include people who had left an institute one year or longer ago, unless they made a direct contribution to the work reported in the paper; (c) to make sure we do not forget non-CLICdp persons who have contributed to this work. Michael Hauschild has contacted all institutes (through their IB representative) in a first attempt to build an author list. This list will be circulated again to allow everyone to check/correct it.

3) Discussion on Organisational Matters

a) Proposal of a new Working Group on CLIC Tracker Technology

Given the choice of an all-silicon tracker for the new CLIC detector concept, and the challenging requirements in terms of position resolution, timing accuracy, material budget etc., the IB **approved** the proposal to create a CLICdp WG on CLIC Tracker Technology. Initially, this WG will be convened by Wolfgang Klempt (CERN), but there is the firm intention to find a co-convenor as soon as the interested and active participants in this WG are identified. In a first phase, teams working on Si tracker issues will be invited to give a presentation.

b) The CLICdp "bi-monthly" meeting

There was clear **support** for continuing CLICdp meetings giving general information and an overview of the technical and analysis work, although the frequency may be somewhat reduced with respect to the past years. (Initially, these were "monthly" meetings, later they became less regular).

c) Discussion on a possible CLICdp 2-day collaboration meeting in 2015

The 2-day CLICdp meeting in June 2014 is considered a success - the IB **is in favour** of holding a similar such meeting in June 2015, preferably at CERN. In addition, "clustering" of WG meetings on a single day or two adjacent days is encouraged.

d) Organisational format of the CLIC workshop

Lucie asked the IB members to give comments on the somewhat different format of the (on-going) CLIC workshop. The echo was positive - the big plenary session in the middle of the workshop (rather than on the Monday) was seen as a positive change, and the fact that there were no CLICdp parallel sessions was considered a great advantage.

e) Rotation of roles in the Speakers and the Publication Committee

The proposals to

- replace Dieter Schlatter by Sophie Redford in the Publications Committee
- rotate inside the Speakers Committee and nominate Eva Sicking as chairperson as of 1 March

were unanimously approved by the IB. The IB **thanks** Ivanka and Dieter for the hard work in the two committees. In the discussion, Mila Pandurovic pointed out that it would be better if there were clearly established rules for the rotation of roles in these two committees. The IB took note - a modification of Annex 4 will be considered and discussed at a forthcoming IB meetings.

f) Term of office and elections for the IB chair and the Spokesperson

Frank Simon pointed to Annex 3 of the MoC, where the term of office for both IB chair and Spokesperson is given as 2 years. Frank's term as IB chair will finish at the end of June 2015, while Lucie Linssen's term as Spokesperson will finish at the end of December 2015 (cf. minutes of the CLICdp IB meeting of February 5th 2014). The rules of the elections in both cases are clearly defined in Annex 3. For the election of the IB chair, a polling officer is needed - the IB unanimously **elected** Konrad Elsener (CERN) for this function. The process should be started - with a call for candidates - no later than March 2015. The new IB chair will then be in charge of organising the election of the spokesperson, in the second half of 2015.

4) A.O.B.

The 7th IB meeting will take place during the 2-day CLICdp meeting in June 2015 (date and time to be announced at a later stage).

(Notes drafted by Konrad Elsener - CERN, 30 January 2015)