

CLICdp spokesperson report

January 29th 2015



Outline

- New CLIC staging baseline
- CLIC Higgs paper
- New “CLIC Tracker Technology working Group”
- Your feedback on (bi-)monthly meetings
- Your feedback on a next “CLICdp 2-day meeting”
- Questions and comments?

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- Role rotations in SpeakCom and PubCom

CLIC re-baselining

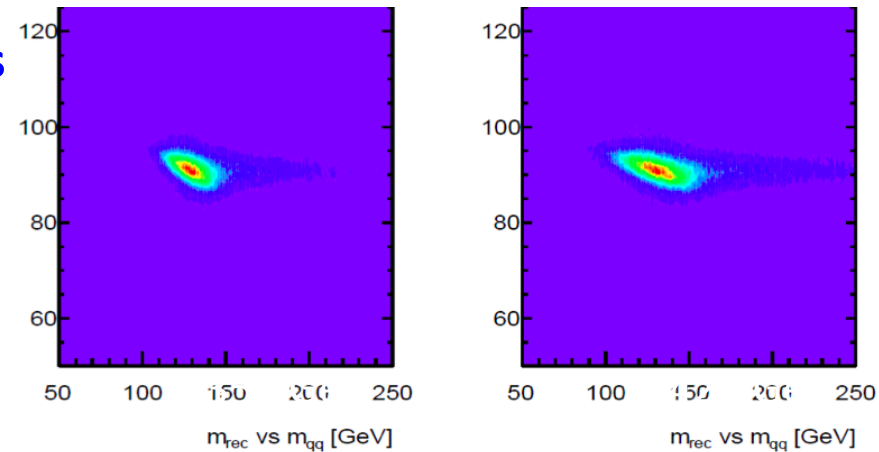


Further CLIC optimisation with energy stages

Dedicated presentations at this workshop:

- Physics analysis session this morning 28/1
- Plenary session tomorrow 30/1

Z mass versus recoil mass



Accelerator is waiting for final physics input for first stage

Issue of trade-off between **top** physics and **Higgs** physics

Latest results indicate:

Top:

- ttbar threshold scan ~ 345 - 355 GeV
- A_{t}^{FB} and top couplings to Z and photon \Rightarrow this requires ~ 400 GeV or more

Higgs:

- HZ \Rightarrow Hqq degrades significantly in accuracy when moving from 350 to 420 GeV

Preferred lower energy stage seems to be ~ 360 GeV

Please give your opinion !

CLIC Higgs publication



“Higgs Physics at the CLIC Electron-Positron Linear Collider”

Editors team: C. Grefe, S. Lukic, P. Roloff, F. Simon, M. Thomson

Nightly build of the draft paper:

<http://proloff.web.cern.ch/proloff/clichiggspaper/>

- A few analyses are still being completed
- Reviewing moves to CLICdp-Draft-2015-xxx on CDS. *When?*
- *Time scale* for the analyses and the completion of the paper?

Author list of the CLICdp Higgs paper


A CLICdp collaboration-wide paper

A few questions to the IB:

- Should we have (most) institutes represented?
 - Also institutes that joined very recently?
- Physics paper => use “physics” as a guideline for the author list?
- A few authors are affiliated to several CLICdp institutes?
- Adding a few contributors that are not members of CLICdp?

Author list Higgs paper



Michael Hauschild 

To: Lucie Linssen

Status Higgs paper author list 29 Jan, 11:30

Dear Lucie,

just before the IB, here's an update on the Higgs paper author list.

One more institute replied (Bucarest), so we have: 19/24 institutes replied, 17 sent their author list (86 authors so far), 2 will do later, 5 missing.

Author list sent

Aarhus
AGH-UST Cracow
Belgrade
Bergen
Birmingham
Bristol
Bucarest
Cambridge
CERN
Glasgow
IFJPAN Cracow
IPASCR Czech Republic
KIT IPE Karlsruhe
Oxford
Santiago
Spanish Network
Tel Aviv

Author list to be sent later

ACAS Australia
MPI Munich

No reply yet

Argonne
LAPP Annecy
Liverpool
Michigan
Minsk

Cheers, Michael

Main silicon tracker technology



Tracker requirements

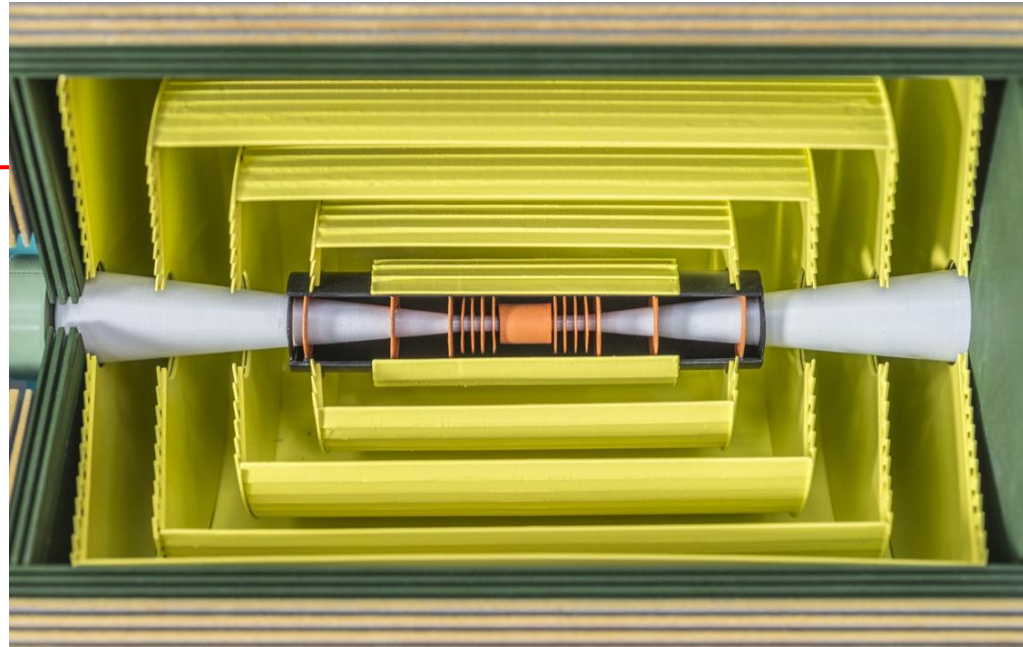
- 7 μm single point accuracy
- time-stamping 10 ns
- ~ 5 -6 tracking layers
- Radius ~ 1.5 m, half-length ~ 2.3 m

High occupancies in certain regions:

\Rightarrow Calls for large pixels and/or short-strips

\Rightarrow Very light $\Rightarrow \sim 1\%X_0$ per layer

- Requires very thin materials/sensors
 \Rightarrow is this compatible with charge sharing and $7\mu\text{m}$ accuracy?
- Can we use power pulsing ?
- Air cooling will probably not be feasible.
- Radiation level 10^4 lower than LHC



Proposal to start a new CLIC tracker technology working group

CLIC tracker technology WG



16 Jan 2015 21:52

[Hide Details](#)

[Sent - Exchange](#)

Lucie Linssen

To: clicdp-ib@cern.ch

In preparation for the CLICdp institute board meeting of 29/1

Dear Institute Board members,

In preparation of the CLICdp IB meeting of Thursday 29/1, I would like to give you advance notification that I plan to seek approval from the IB for the following:

====

In view of the specific requirements for an all-silicon tracker at CLIC, we feel that it would be worth starting a new **"CLIC Tracker Technology Working Group"**. The working group would look in detail at the set of requirements and will try to understand which technology options have the potential to meet them. Part of the working group task would be to identify available technologies for the various engineering aspects of the tracker (e.g. by looking at LHC upgrade R&D and other projects). Actual hardware design, prototyping and tests would be pursued in the framework of the working group as well.
Proposed convener: Wolfgang Klempt (CERN), with possibility to appoint a 2nd co-convener at a later date.

====

When the CLICdp Publication Committee and the Speakers Committee were put in place, "rolling appointment" (rotation) of its members was foreseen. The two committees have now been in action for more than a year. The roles of the chairpersons have turned out to be more time-consuming than anticipated. In view of the above I propose a rotation within the three members of the Speakers Committee, with Eva Sicking as the proposed new chair of the Speakers Committee from March 1st 2015 onwards. Within the Publication Committee one of the members (Dieter Schlatter) is being replaced by Sophie Redford.

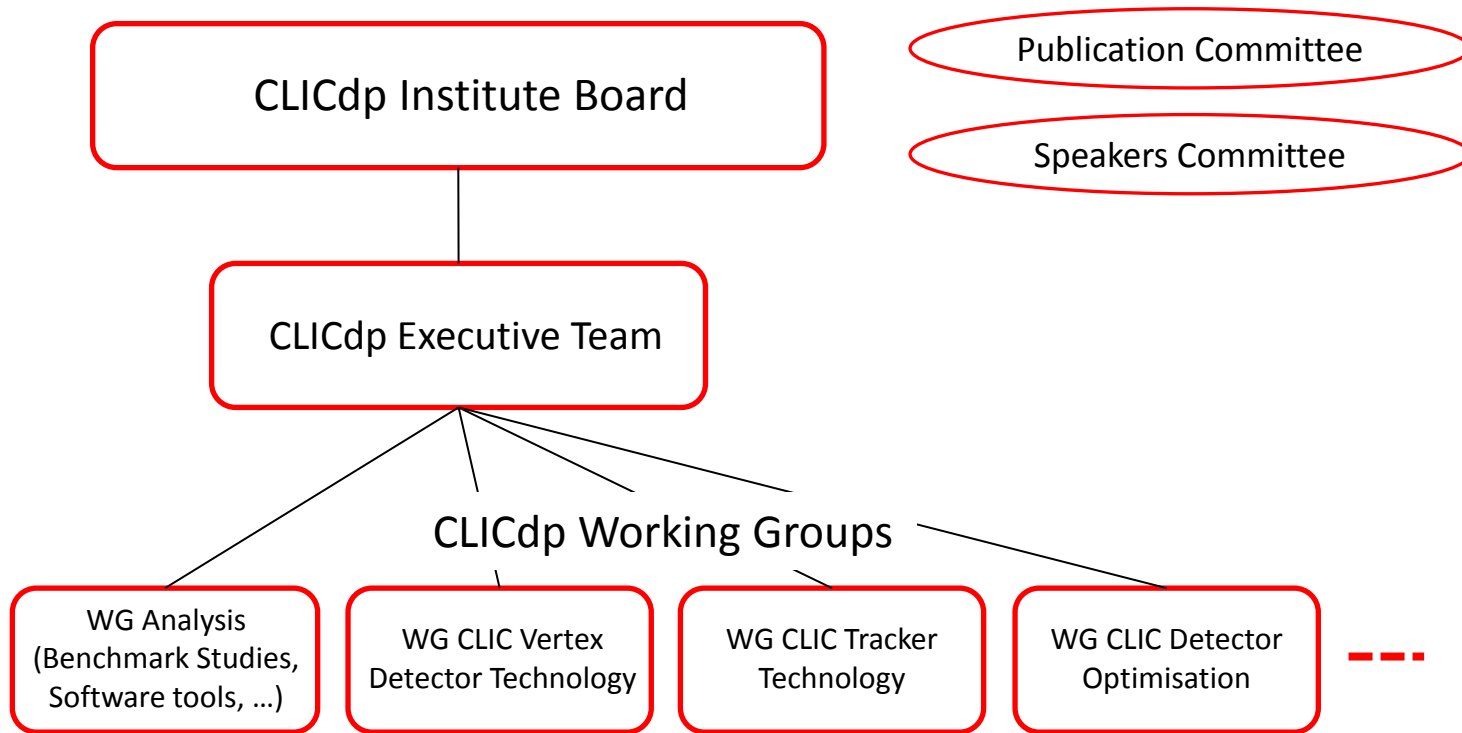
====

This email gives you some time to think about it in advance of the meeting. In case you have comments or hesitations, you can express them at the meeting or, alternatively, send them to myself or Frank Simon prior the meeting.

With my best regards,

Lucie

CLICdp organisation



For more details, see
<http://cllcdp.web.cern.ch/content/organisation>

Your feedback on meetings?



Monthly meetings:

- General information meetings, organised (bi-)monthly
- 7 such meeting took place in 2014

Is this useful? Should we continue? Your suggestions?

CLICdp 2-day collaboration meeting:

- In 2014 on June 10+11: <http://indico.cern.ch/event/314222/>
- *Is this useful? Shall we repeat in 2015? At CERN or elsewhere ?*

Alternative: cluster working group meetings in a short time (1 day / 2 days)

CLICdp at the CLIC workshop:

- *Is the current format convenient ?*

Any other suggestions?

thank you

Further feedback and questions ?

Role rotations in SpeakCom / PubCom



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