

Physics & detector CDR

feedback from review and next steps

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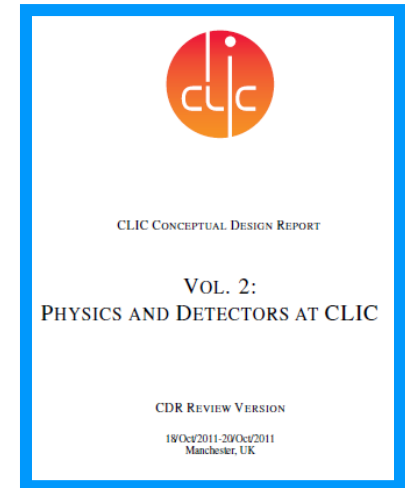


Feedback from review



Review of Volume 2 in Manchester Oct 18-20 went very well.
<https://indico.cern.ch/conferenceDisplay.py?confId=146521>
(17 presentations on the project)

The committee did a thorough job.
We received many questions.
Most of those questions were clarified during the review.



Overall favourable feedback from the committee.

We were asked to add a few more clarifications and some additional studies to the document, and we also got recommendations for future studies.

=> Also, an “executive summary” was requested <=

Time scale for emitting a final version of Volume 2 before SPC does not seem compromised.



CDR status and short-term plans



The CDR contents will be **finalised before the end of 2011**.

During the ~8 weeks between the Review and the final publishing, the CDR will be complemented with:

- ** Inclusion of Review comments and correction of errors.

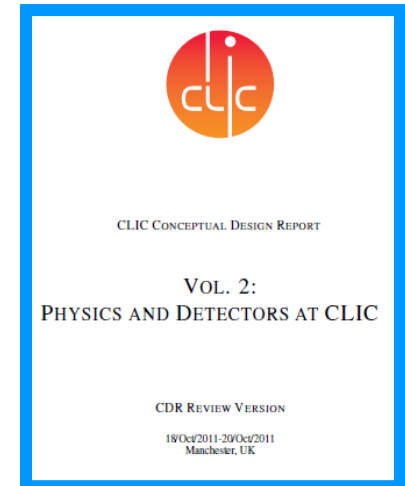
 - Small modifications, otherwise adaptations of future plans

- ** CLIC physics potential with polarised beams

 - A few examples, work in progress => additional section in chapter 1

- ** Measurement of the luminosity spectrum using bhabha scattering.

 - Work in progress

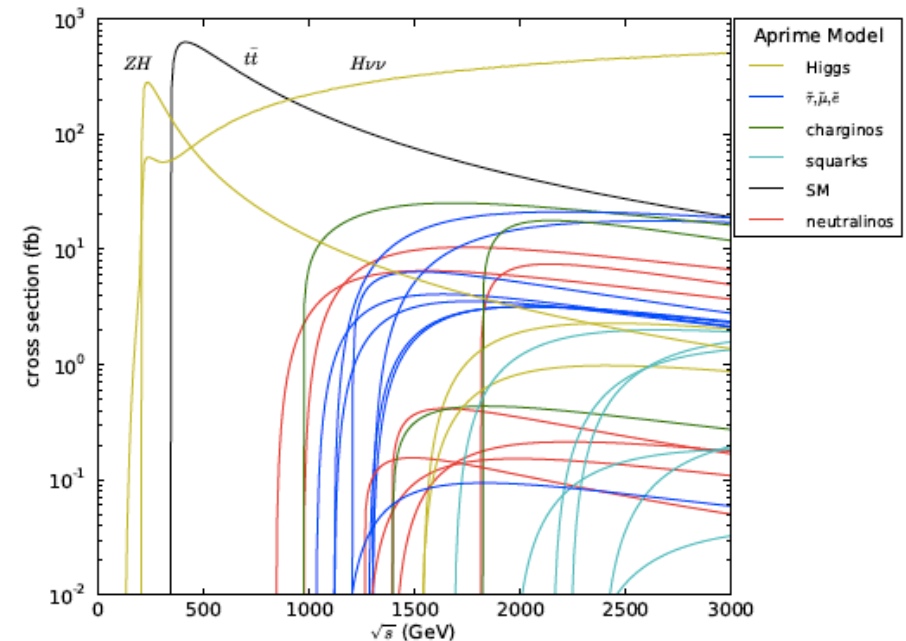


The CLIC physics&detector CDR will be presented to the **CERN Scientific Policy Committee**, December 12+13th, 2011

Publication of the CDR in the form of a **CERN yellow report**

Study physics reach at a few staged
vs energy points, including SM physics,
and its implications on our understanding
of the physics picture

Seem to point to vs energies of
360 GeV, 1.4 TeV, 2.4-3 TeV



Physical masses in GeV

Neutralinos ($\tilde{N}_{1,2,3,4}$) :	357, 487, 904, 911
Charginos ($\tilde{C}_{1,2}$) :	487, 911
Sleptons ($\tilde{e}_R, \tilde{e}_L, \tilde{\nu}_e$) :	559, 650, 644
($\tilde{\tau}_1, \tilde{\tau}_2, \tilde{\nu}_\tau$) :	517, 642, 630
Squarks ($\tilde{t}_1, \tilde{t}_2, \tilde{b}_1, \tilde{b}_2$) :	844, 1120, 1078, 1191
($\tilde{d}_R, \tilde{u}_R, \tilde{d}_L, \tilde{u}_L$) :	2167, 2181, 2197, 2196
Higgs bosons (h^0, A^0, H^0, H^\pm) :	117.8, 765, 765, 769