

CLICdp PubCom report

CLIC workshop 29.01.2015

PubCom members

Philip Burrows

Aharon Levy

Dieter Schlatter → Sophie Redford

Ulrik Uggerhoj

Thank you, Dieter!!

Stamping

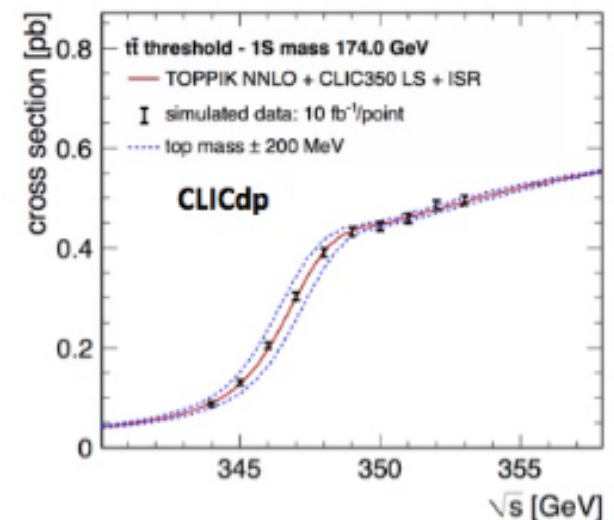
- The automatic “stamping” on upper right-hand side of title page by CDS was stopped.
- The CLICdp template has a place to insert the stamp manually.
- Please check with PubCom what number to use.

Figures

Recommendations about figure styles can be found in **CLICdp Notes Template**

https://svnweb.cern.ch/trac/clicdet/browser/trunk/doc/CLICdp_template/CLICdp_template.pdf

In particular, please include **CLICdp** in the figure



Status of submissions – 2013-2015

TOTAL

Type	2013 (Oct-Dec)	2014	2015 (Jan)
Note	5	5	2
Conf	5	9	1
Draft	6	20	1
Pub			

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Monthly

Type	2013 (Oct-Dec)	2014	2015 (Jan)
Note	1.7	0.4	2
Conf	1.7	0.75	1
Draft	2	1.7	1
Pub			

arXiv

- Posting the CLICdp notes on arXiv makes them more broadly visible than having them only on CDS.
- CLICdp (analysis) notes are generally written with publication quality criteria in mind.
- It's up to the author's judgement to post (or not to post) a CLICdp-Note on arXiv.
- The Publication Committee (chair) can encourage an author to post a CLICdp-Note on arXiv.
- A CLICdp-Note posted on arXiv shall include the statement "**This work was carried out in the framework of the CLICdp collaboration**"

CLICdp on arXiv:

1. Physics highlights at ILC and CLIC

FCAL Collaboration (Strahinja Lukić (VINCA Inst. Nucl. Sci., Belgrade) for the collaboration). Jun 17, 2014. 15 pp.

CLICDP-CONF-2013-001 e-Print: [arXiv:1406.4313](https://arxiv.org/abs/1406.4313) [physics.acc-ph]

2. SM-like Higgs decay into two muons at 1.4 TeV CLIC

I. Bozovic-Jelisavcic, S. Lukic, G. Milutinovic-Dumbelovic, M. Pandurovic (VINCA Inst. Nucl. Sci., Belgrade). Mar 26, 2014. 7 pp.

CLICDP-DRAFT-2014-005 e-Print: [arXiv:1403.6695](https://arxiv.org/abs/1403.6695) [hep-ph]

3. Physics potential for the measurement of $\sigma(\text{H}\nu\nu) \cdot \text{BR}(\text{H} \rightarrow \mu^+\mu^-)$ at a 1.4 TeV CLIC collider

G. Milutinović-Dumbelović, I. Božović-Jelisavčić (VINCA Inst. Nucl. Sci., Belgrade), C. Grefe (CERN), S. Lukić, M. Pandurović, P. Roloff (VINCA Inst. Nucl. Sci., Belgrade). Dec 18, 2014. 17 pp.

CLICDP-NOTE-2014-005 e-Print: [arXiv:1412.5791](https://arxiv.org/abs/1412.5791) [hep-ex]

4. CLICdp Overview: Overview of physics potential at CLIC

for the CLICdp Collaboration (Aharon Levy for the collaboration). Jan 12, 2015. 19 pp.

CLICDP-CONF-2015-001 e-Print: [arXiv:1501.02614](https://arxiv.org/abs/1501.02614) [hep-ex]

4 out of potential 27

CLICdp on arXiv:

Three were conference papers;
One was a note.

For conferences:
“On behalf of the CLICdp collaboration”

For notes:
“*This work was carried out in the framework of the CLICdp collaboration*”



CLICdp-Note-2014-005
19 December 2014

Physics potential for the measurement of $\sigma(H\nu\nu) \times \text{BR}(H \rightarrow \mu^+\mu^-)$ at a 1.4 TeV CLIC collider

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P. Roloff[†]

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Abstract

The potential for the measurement of the branching ratio of the Standard Model-like Higgs boson decay into a $\mu^+\mu^-$ pair at 1.4 TeV CLIC is analysed. The study is performed using the fully simulated CLIC_ILD detector concept, taking into consideration all the relevant physics and the beam-induced backgrounds. Despite the very low branching ratio of the $H \rightarrow \mu^+\mu^-$ decay, we show that the product of the branching ratio times the Higgs production cross section can be measured with a statistical uncertainty of 38 %, assuming an integrated luminosity of 1.5 ab^{-1} collected in five years of the detector operation at the 1.4 TeV CLIC with unpolarised beams. With polarised beams (+80 %, -30 %), the statistical uncertainty is better than 25 %

arXiv:1412.5791v1 [hep-ex] 18 Dec 2014

Summary

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