

CLICdp PubCom report

PubCom members

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Report

- Changed CLIC-DP-.... → CLICdp-....
- 1st meeting of PubCom – Nov 5, 2013

Discussed submission instructions

- Line numbering
- **'On behalf of the CLIC detector and physics (CLICdp) collaboration'** – below author name(s)
- Footnote with conference information – in title page
- Submit at least nine days before deadline
- After approval – remove line numbers

Status of submissions

Draft	Title	Author	Conf/ Type	Date sub.	1 st read	Ap.	CLICdp-
2013-001	Higgs couplings CLIC	Lastovicka, T	EPS 2013	07/10 2013	AL	UU	Conf-2013-002
2013-002	Physics highlight ILC & CLIC	Lukic, S	Gomel 2013	16/10 2013	AL	PB	Conf-2013-001
2013-003	Prototype hybrid pixel ASIC	Valerio, P et al.	TWEPP 2013	03/11 2013	WK	AL	Conf-2013-004
2013-004	ILCDIRAC	Grefe, C et al.	CHEP 2013	01/11 2013	AL	LL	Conf-2013-003
2013-005	Power pulsing for vtx det @ CLIC	Blanchot, G et al.	TWEPP 2013	04/11 2013	LL	DS	Conf-2013-005
2013-006	VertexDetector R&D for CLIC	Dannheim, D	IPRD 2013	10/12 2013	AL	AL	Conf-2013-006
2014-001	$\sigma_{e^+e^- \rightarrow H\nu\nu e} \times$ $BR_{H \rightarrow Z\gamma}$	Sicking, E Grefe, C	Note	23/01 2014	LL		
2014-002	Top Yukawa coupling, ttH	Redford, Roloff, Vogel	Note	31/01 2014	LL		

Stamping

- Will have automatic “stamping” on upper right-hand side of title page.
- PubCom will make sure that corner is free for the stamp.
- Untill automatisisation starts, need to stamp manually all documents submitted so far.

Example

CLICdp-Note-2014-NNN
January 23, 2014

CERN - European Organization for Nuclear Research

Measurement of $\sigma_{e^+e^- \rightarrow H\nu\nu} \times BR_{H \rightarrow Z\gamma}$
at a 1.4 TeV Compact Linear Collider

C. Grefe*, E. Sicking*

* CERN, Switzerland

Abstract

We present a benchmark study of the cross section times branching ratio measurement $\sigma_{e^+e^- \rightarrow H\nu\nu} \times BR_{H \rightarrow Z\gamma}$ evaluated at a 1.4 TeV e^+e^- Compact Linear Collider (CLIC) using the CLIC SiD CDR detector model. The study is based on a full GEANT4 detector simulation and reconstruction of signal and background processes including $\gamma\gamma \rightarrow$ hadrons background events. The combined statistical precision of $\sigma_{e^+e^- \rightarrow H\nu\nu} \times BR_{H \rightarrow Z\gamma}$ including the Z decay channels $Z \rightarrow qq$, $Z \rightarrow e^+e^-$, and $Z \rightarrow \mu^+\mu^-$ for an integrated luminosity of 1.5 ab^{-1} is estimated to be 47 %.

Figures

- Use CLICdp style. Look at open svn repository <https://svnweb.cern.ch/trac/clicdet/browser/trunk/doc/CLICStyle>
- README file describing how to use it.
- In rootstyle → examples.
- Also in CLICCDRPlots.pdf are examples.
- Recommend to label figures with CLICdp or CLIC. Use your judgment which of the figures to stamp with the label.

Example: Graph

```
TGraphErrors *gr
gr→SetFillColor(kWhite)
gr→SetMarkerColor(color)
gr→SetLineColor(color)
gr→SetMarkerStyle(24)
gr→SetTitle("no cut")
gr→GetXaxis()→SetTitle("E_jet [GeV]")
gr→GetYaxis()→SetTitle("rms_90/mean_90 [%]")

TCanvas *c1=new TCanvas("c1","c1")
gr→Draw("AP")
TLegend *leg=gPad→BuildLegend(0.6,0.7,0.8,0.9,"CLIC_ILD")
leg→SetTextSize(0.05)
```

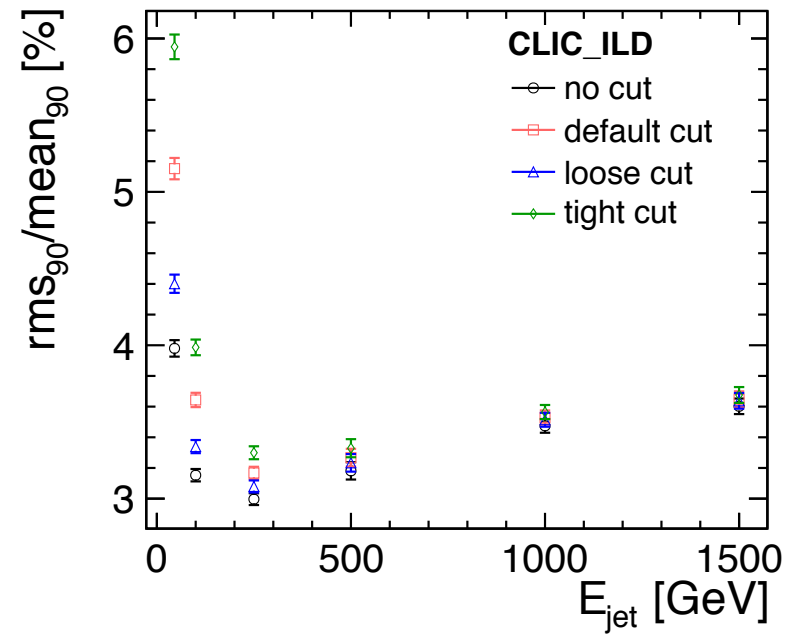


Figure 1: Example for a graph

Example: Histogram

```
TH1F *histo
TLegend *leg=new TLegend(0.2,0.6,0.5,0.9,"CLIC_ILD")
histo->GetXaxis()->SetTitle("Energy [GeV]")
histo->GetYaxis()->SetTitle("Entries [GeV]")
histo->SetTitle("No cut")
leg->AddEntry(histo,"","l")
leg->SetTextSize(0.05)
```

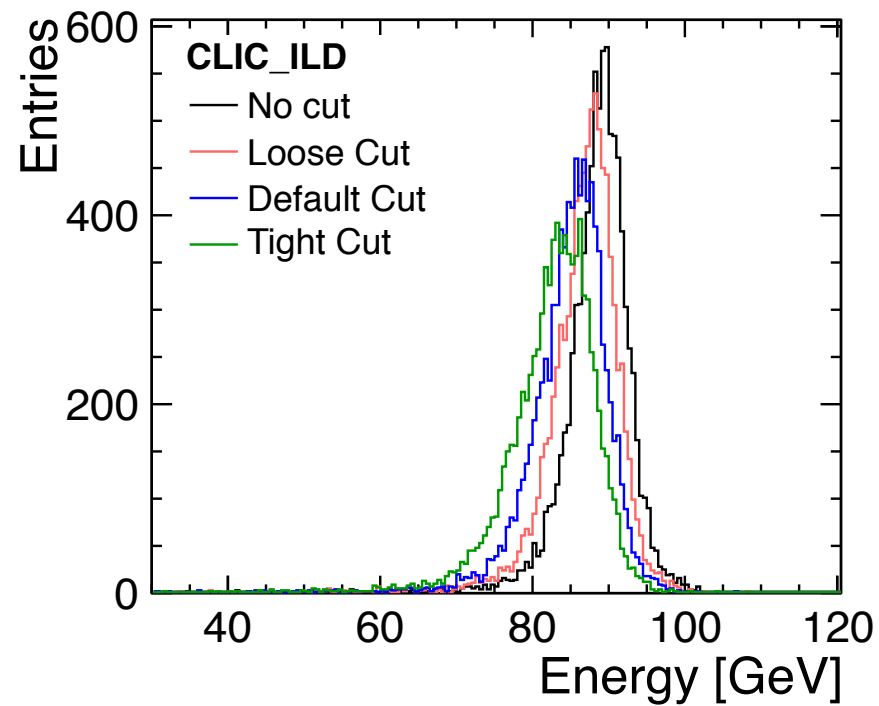


Figure 2: Example for a histogram

CLICdp web page

- **Some basic instruction will appear on the CLICdp web page – to come soon.**