1 Section name [1]

1.1 Subsection name

1.1.1 Subsubsection name

[1] F. Convenor, S. Convenor, . . . (eds.); F. Contributor, S. Contributor, . . .

Rules that have to be obeyed:

References:
they are contained in the file `YRHXS3_Section.bib`. Examples:
\cite{inspire-tag}: [1],
\Bref{inspire-tag}: Ref. [1],
\Brefs{inspire-tagA,inspire-tagB}: Refs. [2, 3]

Units and numbers:
\UGeV: GeV, ...
All definitions can be found in the file `cernunits.sty`.

Natural units have to be used, i.e. $c = 1$, i.e. " GeV" (and *not* " GeV$/c^2$").

Numbers always in math mode, e.g. \$1\%\$,
Ranges must be given with {-}, e.g. \$1{-}2%\$

Intervals with "<", but not with "$\leq$", i.e. $a < b < c$, *not* $a \leq b \leq c$.

Special commands: (more details in the main latex file)
Equations: \Eq{label}, \Eqs{label1,label2}
Figures: \refF{label}, \refFs{label1,label2}
Tables: \refT{label}, \refTs{label1,label2}
Sections: \refS{label}, \refSs{label1,label2}
Chapters: \refC{label}, \refCs{label1,label2}
Appendices: \refA{label}, \refAs{label1,label2}
All definitions can be found in the file `cernall.sty`.

Others: $\gtrsim$, $\lesssim$, $\mathcal{O}(X)$, ...

Personal special command:
introduce text abbreviations such as LO, EW, PDF, etc., in a self-contained way in each section.
Use \providecommand,
do *not* use \def or \newcommand or \renewcommand!

Particle names:
in general the definition for particle 'X' starts is given by '\PX'.
All definitions can be found in the file `heppennames2.sty`.

use latex definitions for particle masses: \MH etc.
All definitions can be found in `lhchiggs.sty`.

If your particle or mass is not in there, define it yourself *in the same style* using \providecommand, see above.

Code names:
all in capital letter, \sc style (see the main latex file).

Tables:
move automatically to the top of the page.
General guidelines:

- Integration errors:
  please give central values and errors with reasonable accuracy!
  Proposal: give 4 digits with integration error for the last digit: $0.xxxx(y)$ (if $y = 0$ omit it).
- Scale, PDF + α_s errors: please give errors in %, not in absolute terms, give errors in two digits: $\pm x.y\%$, if errors are asymmetric, give two columns: $+x.y\%, v.w\%$
- Give one column with the final theory error, resulting from addition in quadrature.
- Vertical/horizontal lines: minimal set of horizontal, no vertical lines

Table 1: Caption above the table

Partial Width	QCD	Electroweak	Total
$\mathrm{H} \to \mathrm{b\overline{b}}/\mathrm{c\overline{c}}$	$\sim 0.1\%$	$\sim$ 1–2% for $M_{\mathrm{H}} \lesssim 135$ GeV	$\sim 2\%$

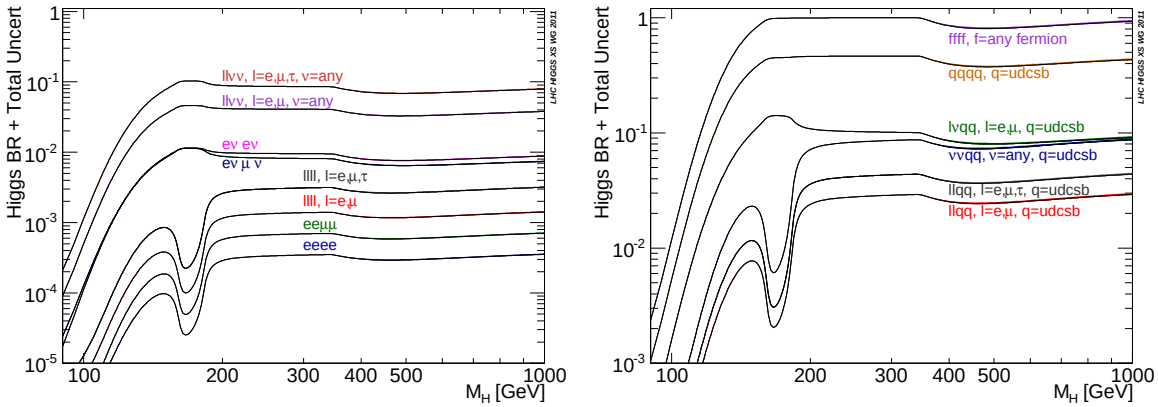

Fig. 1: Caption below the figure.

– Avoid breaking the text with too many tables!
  ⇒ Put long tables at the end of your section or in the appendix.
– Caption above table.

Figures:
move automatically to the top of the page.
General guidelines:

– Prepare plots for the most important results, e.g. for cross sections in the specific channels.
– Prepare plots using the prescriptions+template provided on the wiki page:
  `https://twiki.cern.ch/twiki/bin/view/LHCPhysics/CERNYellowReport`
– Do not use too bright colours / keep black & white printing in mind
  ⇒ See Section 13 in Graphics Guidelines on the IOP site:
  `http://authors.iop.org/atom/usermgmt.nsf/AuthorServices`
– Caption below figure!
– Do not forget the 'LHC-Higgs XS' logo.
  Please all extend this logo with '2012'.
– The figure width should be half of the full width, see this tex file.
– The figures go into a subdirectory `YRHXS3_Section` and are named `YRHXS3_Section_fig`n`.eps`.

Feynman graphs:

– use axodraw.
– indicate vertices with thick points
  ⇒ \Vertex command !
– use latex shorthands \Pe, etc., for particle names (see above)
– rescale the Feynman graphs to a size similar to the one used in YR1.
  ⇒ put figure within {\unitlength .6pt \scriptsize \SetScale{.6} ... } or similar

References

[1] J. Alwall, M. Herquet, F. Maltoni, O. Mattelaer, and T. Stelzer, *MadGraph 5 : Going Beyond*, JHEP **1106** (2011) 128, arXiv:1106.0522 [hep-ph]. * Temporary entry *.

[2] S. Frixione and B. R. Webber, *The MC@NLO 3.1 event generator*, arXiv:hep-ph/0506182 [hep-ph].

[3] R. Frederix, S. Frixione, V. Hirschi, F. Maltoni, R. Pittau, et al., *Four-lepton production at hadron colliders: aMC@NLO predictions with theoretical uncertainties*, arXiv:1110.4738 [hep-ph]. * Temporary entry *.