INSTRUCTIONS FOR THE PREPARATION OF CONTRIBUTIONS TO LES HOUCHES REPORTS

The Editors
Local Organizing Committee

Abstract
If you use this template and follow the instructions therein, your contribution will be in accordance with the rules adopted for the preparation of the Les Houches Reports. This template is borrowed from the one used to prepare CERN Reports.

1. INTRODUCTION

In the interest of simplification of the editing task, authors must observe the following recommendations. Each contribution should be in its final form.

2. GENERALITIES ON TYPING

We recommend that you use Latex 2ε.

2.1 Obtaining the style file

You can find the class file `cernrep.cls` on WWW at the following URL:

http://preprints.cern.ch/cernrep/templates

You should start your main .tex file by the `\documentclass[11pt]{cernrep}` command.

2.2 Format for the text

The above template will fill a frame of 16 cm $\times$ 24 cm (i.e. a margin at the top of 3.0 cm, bottom of 3.0 cm, and left and right of 2.5 cm on A4 paper). Fill the frame completely. Do not start a new section on a new page, but continue on the same page. Reference to page numbers should not be made within the text, as the pages of each contribution will be renumbered. Reference can be made to section numbers, see below.

2.3 Structure of the text

The standard Latex commands `\section`, `\subsection` and `\subsubsection` should be used for headings. In the text, leave a blank line after each paragraph. References to other documents should be made using the `\cite` command. The command `\ref` should be used to refer to equations, figures, tables, and headings within your contribution which should be labelled using the `\label` command within the equation, figure, table environment, and headings.

We suggest that the conveners define a standard labelling of the sections for their whole report, and that they urge all contributors to adopt this standard. This would make easier the possibility for cross references between the different sections to be written by different contributors. For example, the sections in the QCD/SM Report will be labelled as follows:

Parton Distributions Functions: `\label{sec:pdf;qcdsm}`

Higher Orders: `\label{sec:ho;qcdsm}`

Resummations: `\label{sec:resum;qcdsm}`

Jets & Photons: `\label{sec:jetphot;qcdsm}`

Monte Carlos: `\label{sec:mc;qcdsm}`

The template defines automatically the font and pointsize to be used. It uses the compact font 'Times', with the following point sizes:

- 14 AND BOLD CAPITALS FOR THE TITLE.
- 11 and italic lower-case characters for the *names of the authors* and for *emphasis in the text* (no underlining).
- 11 AND BOLD CAPITALS FOR THE SECTION HEADINGS.
- 11 and bold lower-case characters for the subsection headings.
- 11 and italic lower-case characters for the sub-subsection headings.
- 11 and plain lower-case characters for the main text.
- 9 and plain lower-case characters for the captions to figures and tables.

The text will be typed in single-line spacing ($\sim$ 4 mm from the bottom of one line to the bottom of the next) with a paragraph indention of 1 cm, except for the first paragraph after a heading, which is not indented. Above the section headings, one line of space will be left. Between paragraphs, below section headings, above and below subsection and sub-subsection headings, and between entries in the list of references, half a line of space will be left.

3. TEXTS

3.1 Contents

The conveners should include a table of contents at the beginning of the report.

3.2 Abstract

Only one overall abstract should be written at the beginning of the whole report, by the conveners.

3.3 Section headings

A recapitulative list of the participants of all Working Groups with their respective addresses, their electronic mail addresses and financial supports will be provided separately in the report of overall presentation of the meeting, to be written by the organizers.

The names of the coordinators of a section corresponding e.g. to a working subgroup should be mentioned in a footnote attached to the title of the section. The names of the contributors to the section should be mentioned in a separate footote, attached to the title of the section in a similar way. The .tex file should look like this:

```
\section{TITLE\protect\footnote{Section coordinator: A. Coord}
$^{,}$~\protect\footnote{Contributing authors: C. Auth, D. Writ}}
```

3.4 Formulae

The default Tex format is acceptable for most formulae. For numbered equations, the construction

```
\begin{equation}
...
\label{name}
\end{equation}
```

should be used (the `{eqnarray}` constructions are also perfectly acceptable).

Symbols of variables, e.g. x, σ should be typed in the text as `$x$`, `$\sigma$`, taking care that they are consistent throughout the report. Equations should be numbered consecutively, with the number enclosed in parentheses and placed flush with the right-hand margin. References to them in the text should be of the form: ‘Eq. (3), Eqs. (7) and (8), Eqs. (3)-(5)’.

3.5 Footnotes

Footnotes should be inserted in the text using the `\footnote{content}` command.

3.6 References

References should be cited in the text using the abbreviation ‘Ref(s).’, and ‘Reference(s)’ in full if this word occurs at the beginning of a sentence. This should be followed by the command `\cite{name}`.

You should add at the top of the document the `\usepackage{cite}` command to handle multiple citations such as `\cite{name1,name2,...,namep}`.

The references should appear in consecutive numerical order in the text. They should be all listed at the end of the report. The title of the articles should not appear in this list.

The coordinators of subgroups - then even more the WG conveners - will be collecting various contributions, each one giving its own references. If the bibliography and citations are not standardized from the beginning and ‘automatized’, it may prove very fastidious and much time-consuming to put the references in order, avoid redundancies, etc., when all the contributions are collected. Conveners should follow the following procedure:

- urge the participants to use BibTeX for the references. Participants will have to create a BibTeX file;
- impose a standard labelling of references to all contributors; the simplest idea is that each contributor fills his/her biblifile.bib directly from SPIRES using the SPIRES BibTeX formats.

Here are a few instructions for people not familiar[1] with BibTeX.

3.61 Creation of BibTeX file

This file should be called, e.g. biblifile.bib.

For example, for articles, the SPIRES format looks like this:

```
@Article{Laenen:2000ij,
     author    = "Laenen, Eric and Sterman, George and Vogelsang, Werner",
     title     = "Recoil and threshold corrections in short-distance cross
                  sections",
     journal   = "Phys. Rev.",
     volume    = "D63",
     year      = "2001",
     pages     = "114018",
     eprint    = "arXiv:hep-ph/0010080",
     SLACcitation  = "%%CITATION = HEP-PH 0010080;%%"
}
```

As specified above, in the final list of references of the report, the titles should not be mentioned for articles, and, as usual, only the initials of the first names of authors should be included but not the spelling of these first names. To this end, each contributor would make the relevant corrections in his/her own biblifile.bib, in order that it looks like this:

[1] Don’t panic! I was not familiar either before writing this instruction file, and I’ve tried each step mentioned.

```
@Article{Laenen:2000ij,
     author    = "Laenen, E. and Sterman, G. and Vogelsang, W.",
     title     = " ",
     journal   = "Phys. Rev.",
     volume    = "D63",
     year      = "2001",
     pages     = "114018",
     eprint    = "arXiv:hep-ph/0010080",
     SLACcitation  = "%%CITATION = HEP-PH 0010080;%%"
}
```

These corrections should be done before contributors send the files to conveners.

3.62 Commands to put in mainfile.tex

In the mainfile.tex, the usual command
`\begin{document}`
should be followed by
`\bibliographystyle{unsrt}`
(The key `{unsrt}` will make the references appear in consecutive numerical order in the text.).

The references should be quoted in the text as, e.g. for the above example, `\cite{Laenen:2000ij}`.

The `mainfile.tex` should end as
`\bibliography{biblifile}`
`\end{document}`
(assuming the file biblifile.bib is in the same directory as mainfile.tex, otherwise the full path should be given).

3.63 Processing

To process the file, use the following sequence of commands:
`latex mainfile`
`bibtex mainfile`
(The second command makes the BibTeX programme create and fill a file of bibliographic references named mainfile.bbl. The content of this file looks pretty much the same as the usual list of references which you would write on your own by hand-crafted means) and then again twice
`latex mainfile`

(For more information about BibTeX, see LaTeX manual or ask your friends).

3.64 Easy life for conveners!

Contributors would then send two files, the mainfile.tex containing the text and the biblifile.bib containing the references in BibTeX format. Conveners could then call all the BibTeX files using the command `\bibliography{biblifile1,biblifile2,biblifilep}`. Conveners would not have to worry about ordering: putting
`\begin{document}`
immediately followed by
`\bibliographystyle{unsrt}`
at the beginning of the main .tex file, and ending it as
`\bibliography{biblifile1,biblifile2,biblifilep}`

```
\end{document}
```

generates the reference list and calls references in the right order.

The standardized labelling will make sure that the same naming is used. Then, redundancies in references could be easily checked (using, e.g. the command `\bibliographystyle{plain}` which generates the reference list in alphabetical order), etc.. The time invested in planning this will help you saving days, otherwise wasted in fastidious hand-crafted handling of hundreds of references, and nervous breakdown.

3.7 Figures

Figures should, for example, be referred to as 'Fig. 3, Figs. 3-5', etc., or 'Figure' at the beginning of a sentence.

Figures should be prepared electronically using Postscript and Encapsulated Postscript format for the graphic file. All lines should be heavy enough and all figures, decimal points, symbols, etc., large enough and sufficiently well spaced to ensure clarity. To include figures in the text, a contruction of the form

```
\begin{figure}[htbp]
\includegraphics[width=xcm,height=ycm]{file_name.eps}
\caption{blablabla}
\label{name}
\end{figure}
```

should be used. Figures may be centred using the `\begin{center}...\end{center}` construct within the figure environment.

You must add at the top of the document the `\usepackage{graphicx}` command to include the pictures.

All figures, diagrams, etc., must remain within the same area of 16×24 cm. Figure captions should be brief, e.g. 'Fig. 3 A short title'. The template will automatically type them in pointsize 9. Very detailed illustrations may require a full page; if necessary, they may be placed sideways on the page; when this is done, no text may appear on that page, and the caption must also read sideways.

Small unnumbered diagrams or graphs should be inserted where referred to in the text, preferably embedded in it to save space. Numbered figures and illustrations should follow the paragraph in which they are first discussed. If this is not feasible, they may be placed on the following page. If it is not possible to place *all* numbered figures in the text, then they should *all* be placed at the end of the paper.

3.8 Tables

Tables should be referred to in the text as Table 1, Tables 2–7. They should be centred on the page width, with the table number, followed by a brief caption in point size 9, typed *above* them if possible. For the positioning of tables, follow the same rules as those for numbered figures.

APPENDIX – SUBMITTING YOUR CONTRIBUTION

Please submit your contribution by electronic mail or by electronic file transfer - conveners will give their own preferences - in the form of a mainfile.tex for the text, a separate biblifile.bib for the references, and separate plotfile.ps or plotfile.eps for each of the figures.