

Author's guide to typesetting the TDR *

The ILC TDR Technical Editors
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1 Introduction

Authors must observe the following instructions to ensure consistency and uniformity in the style and layout of the TDR.

Although the typesetting rules that are described are of a general nature, the present document emphasises their use with \LaTeX . Templates and more detailed information for *Word* users are available at the page <http://forge.linearcollider.org/tdr>.

1.1 Current version

Make sure you have the current version of the class, templates and documentation. If you have not downloaded the template set rather recently, you might want to download it at the time that you are ready to use it for writing your chapter. Links to the current files can be found at <http://forge.linearcollider.org/tdr>.

1.2 Technical editorial support

If you find that you are having a problem after you have read this documentation carefully, help may be requested by sending email to TDR Technical Editors: Maura Barone (maura@fnal.gov) and Benno List (benno@desy.de).

1.3 Files in the template package

- `TDR-guidelines.tex` : this file in \LaTeX format

*This document has been adapted from <https://desktop-publishing.web.cern.ch/desktop-publishing/cernrep.pdf>

- `TDR-guidelines.pdf` : this file in PDF format
- `TDR.cls` : TDR \LaTeX class
- `TDR-LaTeX-template.tex` : \LaTeX template file, for authors to use in writing their own contribution
- `TDR-LaTeX-template.pdf` : \LaTeX template in PDF format
- `TDR-LaTeX-template.wrapper.tex` : wrapper for building the \LaTeX template
- `TDR-LaTeX-template.bib.tex` : sample \LaTeX bibliography file
- `owl-petunia.jpg` : figure sample file
- `ilc-logo.jpg` : figure sample file
- `TDR-Word-template.dotx` : Word template file, for authors to use in writing their own contribution

2 Sectioning commands and paragraphs

The standard \LaTeX commands `\section` (level 1), `\subsection` (level 2), `\subsubsection` (level 3), should be used for headings. Do not start a new section on a new page, but continue on the same page.

In the text, leave a blank line after each paragraph. In the editor, keep the width of a line limited to about 80 characters. It will make easier comparing different versions of your file by using SVN.

3 Figures

Figures should be prepared electronically.

Drawings, charts or illustrations may be in color or black and white. All text should, however, appear in black. All lines should be heavy enough (min. 0.75 point) and all figures, decimal points, symbols, subscripts and superscripts, etc., large enough and sufficiently spaced to ensure clarity when printed *at the final size*. We suggest the use of either Times Roman or Arial font for the lettering in your figure. Do not add a title to the image, rather use the figure caption.

Before using material such as illustrations taken from other sources, do not forget to obtain permission from the copyright holder.

3.1 Which formats to provide for the TDR

There are two kinds of graphics formats: vector and bitmap (raster) graphics. For bitmaps we have: non compression (which can make your files truly huge, dependent on resolution and color depth), and 'lossy' compression methods which cause a consequent reduction in image quality. Vector graphics are resolution/device-independent, while raster graphics are resolution- or device-dependent.

1. For drawings/charts/graphics/plots (everything other than photographs) you **must** provide vector graphics.

Most vector drawing programs offer export functionality for producing EPS or PDF output. Original vector-based graphics 'saved as' EPS/PS/PDF will not have scaling problems. Therefore, vector graphics for instance generated and 'saved-as' pdf with Excel or other graphic packages are usually acceptable. **Do not convert vector graphics to JPEG or PNG.**

2. For photographs, you can provide JPEG in most cases, since the quality loss by compression is normally imperceptible when printed. JPEG is preferred to PNG. In fact, PNG was designed for transferring images on the Internet, not for professional-quality print graphics, and therefore does not support non-RGB color spaces such as CMYK.

Make sure the 'effective resolution' is **300dpi** or more. Remember that screen resolution is normally about 75 to 100 dpi, and color printers claim to have high resolutions but dither color prints, so you will hardly notice the difference compared to JPEG with higher resolution. If you are unsure of the resolution, submit the original file (do not scale it, crop it, or convert it to a different format) and **contact the Technical Editors**. We will notify you if the resolution is critical or unsatisfying for printing.

Important note: dpi (dots per inch) and ppi (pixels per inch) are two different things, yet often dpi is used when ppi is meant. dpi relates strictly to print. When used in photo software (e.g., *Photoshop*), dpi means ppi. For instance *Photoshop* uses the word 'Resolution' meaning "paper ppi resolution when printed" (not the digital resolution of the image).

3.1.1 Summary of what to do and not to do when preparing figures

- **Do not** take screen captures, or copy&paste from/into *Word/Powerpoint*.
- Make sure that the image is of high quality when printed and is of high enough resolution (minimum 300 dots per inch). A full width image will typically be 15 cm wide.

- We accept PICT, TIFF, PDF, PNG, and JPEG files. Encapsulated PostScript (EPS) files are preferred. JPEG are preferred to PNG for pictures.
- Images must be provided as separate files. Do not give filenames that contain spaces.
- Always submit each image in the 'original' format (e.g. the format generated by the drawing program, digital camera, etc.).
- If unsure about any of the above items, **contact the Technical Editors**

3.2 Positioning and layout

All figures must remain within the page area, where, if necessary, the page may be turned 90° to accommodate the figure. When this is done, the caption must be oriented in the same way as the figure, and no other text may appear on that page. The bottom of the turned illustrations should be at the right-hand side of the page.

3.3 Including your figure in L^AT_EX

Graphics are different from text fonts, they cannot be handled by TeX's font mechanisms; instead, there are special L^AT_EX packages to deal with them, like the `graphicx` package. Figures are included with the `figure` environment. In the example that follows we include an EPS graphics file (`bowl-petunia.eps`). The file extension `.eps` does not need to be specified. In fact, `pdflatex` expects graphics files to be in pdf format, whereas `latex` expects the files to be in eps format.

The predefined width values are: `\figwl` (large), `\figwm` (medium), `\figws` (small), `\figwf` (full). They correspond to a length 80%, 50%, 30%, and 100% of the textwidth.

The figure caption (specified as argument of the `\caption` command), must *follow* the figure body, and should preferably be brief. No full stop is necessary unless the caption is more than one sentence long, in which case full punctuation should be used.

3.3.1 Example

An example with a cross-reference to a figure follows. The reference is defined by the `\label` command *following* the `\caption` command. A cross-reference is generated with the `\ref` command on the second line. Note the cross-reference key (`fig:petunia`) which clearly indicates that it refers to a figure (see Section 8 for a discussion of the importance of using good keys).

```

\section{Section title}
In Fig.~\ref{fig:petunia} we see that ...
\stepcounter{figlcl}
\begin{figure}[htb]
  \includegraphics[width=\figws]{bowl-petunia}
  \caption[Petunia bowl]{What could be the relationship
    between a bowl of petunias and the ILC Technical
    Design Report?}
  \label{fig:petunia}
\end{figure}

```

3.4 References to figures

\LaTeX 's cross-reference mechanism can be used to refer to figures. A figure is defined with the `\label` command, which must *follow* the `\caption` command.

Figures must be referenced in the text in consecutive numerical order with the help of the `\ref` command. Examples of references to figures and how to produce them follow (see also Table 3).

- ‘Fig. 3’ produced by `\Fref{fig:petunia}`,
- ‘Figs. 3–5’ produced `\Figures~\ref{fig:petuniaa}--\ref{fig:petuniab}`,
- ‘Figure 3’, produced by `\Figure[b]~\ref{fig:petunia}`. Note the use of the optional argument `[b]`, which indicates that the word ‘Figure’ should be typeset in full, in particular at the beginning of a sentence.

Figures with several parts are cited as follows: ‘Fig. 2(a) and (b), Figs. 3(a)–(c)’.

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 (\LaTeX 's float mechanism takes care of this automatically, in principle).

4 Tables

Tables are defined with the `table` environment. Each table should be centred on the page width, with a brief caption (specified as argument of the `\caption` command) *preceding* the table body.

In general, tables should be open, drawn with a horizontal line at the top and bottom, and single horizontal line separating column headings from data.

Like figures, tables must be referenced in the text in consecutive numerical order with L^AT_EX's `\ref` command. Examples of cross-references to tables follow (commands that can be used to generate the given text strings are shown in parentheses): ‘Table 5’ (`\Tref{tab:mytab}` or `\Table~\ref{tab:mytab}`), ‘Tables 2–3’ (`\Tables~\ref{tab:mytaba}--\ref{tab:mytabb}`). The word ‘Table’ should never be abbreviated.

4.1 Formatting and layout within the table

Always capitalise the first word in all headings and subheadings. Do not use full stops for headings. Unit of measure that pertain to each entry in a whole column should be entered in parentheses on a separate line below the column heading. (If the same unit is used throughout the table, it should be written in parentheses on a separate line below the caption.)

Unsimilar items should be aligned on the left, whereas similar items should be aligned on the operator or decimal point. All decimal points must be preceded by a digit.

4.2 Table captions

Table captions should be brief and placed *above* the table (unlike a figure caption, which appears below). No full stop is necessary unless the caption is more than one sentence long, in which case full punctuation should be used.

4.3 Notes in the table

Notes in tables should be designated by superscript lower-case letters, and begun anew for each table. The superscript letter should be placed in alphabetical order moving from left to right across the first row and down to the last. The notes should then be listed directly under the table.

References cited in tables should appear in consecutive numerical order, following the order explained above for notes (left to right, top to bottom). They should appear exactly as references cited in the main body of the document (and be treated as part of the text in terms of numbering, so be careful when moving tables containing references).

4.4 Example

```
\stepcounter{tblcl}
\begin{table}[htb]
  \caption[Basic design parameters for the ILC.]{ Basic design
```

```

parameters for the ILC ( $^a$ ) values at  $\text{SI}\{500\}\{\text{GeV}\}$  center-of-mass
energy,  $^b$ ) DRFS,  $^c$ ) KCS )~\cite{Walker:2011}.
\label{tab:BaseParams}}
\begin{tabular}{l s l } \toprule
Parameter & & Unit & & Value & & \\ \midrule
Center-of-mass energy range & &  $\text{GeV}$  & &  $200 - 500$  & & \\
Peak luminosity $^a$ ) & &  $\text{cm}^{-2}\cdot\text{s}^{-1}$  & &  $\text{num}\{2d34\}$  & & \\
Average beam current in pulse & &  $\text{mA}$  & &  $4.4^b$ ) /  $5.8^c$ ) & & \\
Pulse rate & &  $\text{Hz}$  & &  $\text{num}\{5.0\}$  & & \\
Pulse length (beam) & &  $\text{ms}$  & &  $0.96^b$ ) /  $0.73^c$ ) & & \\
Number of bunches per pulse & & & &  $\text{num}\{1312\}$  & & \\
Charge per bunch & &  $\text{nC}$  & &  $\text{num}\{3.2\}$  & & \\
Accelerating gradient $^a$ ) & &  $\text{MV}\text{m}^{-1}$  & &  $\text{num}\{31.5\}$  & & \\
RF pulse length & &  $\text{ms}$  & &  $2.19^b$ ) /  $1.65^c$ ) & & \\
Beam power (per beam) $^a$ ) & &  $\text{MW}$  & &  $\text{num}\{5.3\}$  & & \\
\midrule
Typical beam size at IP $^a$ ) & & ( $h \times v$ ) & &  $\text{nm}$  & &  $474 \times 5.9$  \\
Total AC Power consumption $^a$ ) & &  $\text{MW}$  & &  $180^b$ ) /  $177^c$ ) & & \\
\bottomrule
\end{tabular}
\end{table}

```

Table 1: Basic design parameters for the ILC (a) values at 500 GeV center-of-mass energy, b) DRFS, c) KCS).

Parameter	Unit	Value
Center-of-mass energy range	GeV	200 – 500
Peak luminosity a)	$\text{cm}^{-2}\text{s}^{-1}$	2×10^{34}
Average beam current in pulse	mA	4.4^b) / 5.8^c)
Pulse rate	Hz	5.0
Pulse length (beam)	ms	0.96^b) / 0.73^c)
Number of bunches per pulse		1312
Charge per bunch	nC	3.2
Accelerating gradient a)	MVm^{-1}	31.5
RF pulse length	ms	2.19^b) / 1.65^c)
Beam power (per beam) a)	MW	5.3
Typical beam size at IP a) ($h \times v$)	nm	474×5.9
Total AC Power consumption a)	MW	180^b) / 177^c)

This is an example of a simple table, following the proposed rules. Notice the `\toprule` and `\bottomrule` commands at the beginning and end of the `tabular`

environment to generate the lines at the top and the bottom of the table, as well as the `\midrule` command to separate the heading from the data.

5 Equations

Equations should be treated as part of the text, and therefore punctuated (with a space between the end of the equation and the punctuation mark). Equations are numbered consecutively throughout the report.

An unnumbered single formula is delimited by `\[` and `\]` (alternatively a `displaymath` environment can be used), while a numbered equation is generated with the `equation` environment. You should **never** use the `$$` construct. The TDR L^AT_EX set of packages automatically loads the `amsmath` class, which offers a large choice of constructs for typesetting mathematics.

For cross-referencing equations use the L^AT_EX commands `\label` and `\ref`, as explained in Section 8. A simple example, with a cross-reference to a formula, follows.

```
\section{Section title}
\label{sec:mysection}
Einstein has expressed the relation between energy  $E$ 
and mass  $m$  in his famous equation~(\ref{eq:einstein}):
\begin{equation}
    E=mc^2 \label{eq:einstein}
\end{equation}
```

6 Bibliographical references

References should be cited in the text using numbers within square brackets: ‘example [1], example [1, 2], example [1–5]’. This is achieved with the `\cite` command. One can also write ‘see Ref. [1]’, ‘Refs. [1]–[5]’, and, at the beginning of a sentence, ‘Reference [2]’. These strings can be produced as follows (see also Table 3).

- `\Bref{bib:mybiba}` or `\Ref~\cite{bib:mybiba}` typeset, e.g., ‘Ref. [1]’.
- `\Refs~\cite{bib:mybiba}--\cite{tab:mybibb}`, typesets, e.g., ‘Refs [1–5]’.
- `\Bref[b]~\ref{bib:mybibc}` typesets, e.g., ‘Reference [3]’. The optional argument `[b]` indicates that the word ‘Reference’ should be typeset in full, in particular at the beginning of a sentence.

Bibliographical references should appear in consecutive numerical order and should be listed in numerical order at the end of the text. Punctuation should be used outside the brackets.

6.1 List of references

The list of references (the `\bibitem` entries) will look as follows.

```
\bibitem{Phinney:2007gp}
  N.~Phinney, N.~Toge and N.~Walker,
  \artitlekeep{International Linear Collider Reference Design Report
  Volume 3: Accelerator,} \arxiv{0712.2361} [physics.acc-ph].
%
\bibitem{Walker:2011}
  N. Walker, \artitlekeep{ILC parameters (working assumptions),} 2011.
  \edms{D00000000925325}
```

As shown, each `\bibitem` is identified with a reference key (`Phinney:2007gp`, `Walker:2011`, etc.), which allows one to refer to the relevant bibliography entry with a `\cite{Walker:2011}` command in the text. Use the command `\artitlekeep{title goes here}` when you want the title of the reference to appear in the final bibliography. Use `\artitle{title goes here}` if for convenience you want to list the title in the bibliography file, but don't want to display it in the bibliography. Use the abbreviations `\arxiv`, `\edms`, `\ilcdoc`, `\jacow`.

The information about each entry must be specified in a separate file, *cf.* `tdr2-intro_bib.tex`, which can be read by the BibTeX program for generating the list of references.

7 Footnotes

Footnotes are to be avoided. If absolutely necessary, they should be brief, and placed at the bottom of the page on which they are referred to. Take care when citing references in the footnotes to ensure that these are correctly numbered.

8 Referencing structural elements

In this section we give a general overview of L^AT_EX's reference mechanism which makes it easy to reference structural elements. First a `\label` command, with a unique *key* as its argument to identify the structural element in question, must be placed in the source, as follows.

- For sectioning commands, such as `\section`, `\subsection`, `\subsubsection`, the `\label` command must *follow* it.
- Inside `figure` and `table` environments, the `\label` command must be placed *after* the `\caption` command.
- Inside an `equation` environment the `\label` command can be placed anywhere.
- Inside an `eqnarray` environment, the `\label` command can be used to identify each line, so that it must be placed *before* each end-of-line `\\`. If for a given line no line-number has to be produced, a `\nonumber` command should be used.
- Inside an `enumerate` environment a `\label` command can be associated with each `\item` command.
- Inside a `footnote` a `\label` command can be placed anywhere.

As seen in all the examples in this document, for reasons of clarity it is best to place the `\label` command immediately *following* the element it refers to (rather than inserting it inside its contents).

From any place in the document one can refer to a structural element identified with a `\label` command with the help of a `\ref` command. An example follows.

```

\section{My first section}\label{sec:first}
Figure~\ref{fig:fdesc} in Section~\ref{sec:second} shows \dots
\begin{table}
  \caption{table caption text}\label{tab:tdesc}
  ...
\end{table}
\begin{equation}
  \exp{i\pi}+1=0\label{eq:euler}
\end{equation}
\section{My second section}\label{sec:second}
In Section~\ref{sec:first} contains Table~\ref{tab:tdesc} and
Eq.~\ref{eq:euler}
\begin{figure}
  \begin{center}
    \includegraphics[...]{...}
    \caption[...]{Text of figure caption}
    \label{fig:fdesc}
  \end{center}
\end{figure}

```

To easily differentiate between references to the various structural elements it is good practice to start the key with a few characters identifying it (e.g., `sec:` for a sectioning command, such as `\section`, `\subsection`, etc., `fig:` for figures, `tab:` for tables, and `eq:` for equations, including `eqnarray` environments (which should have a `\label` command placed before the `\\` if you want to identify the line in question). The second part of the key should identify the particular element clearly, e.g., use of a mnemonic component, such as `eq:euler` in the example of the equation reference above. Avoid using keys with only digits, such as `f1`, `f2`, etc., since, if for any reason structural elements are eliminated or change position in the source, confusion can result.

9 Spelling and grammar

For more information on English grammar rules and commonly misused words and expressions', please see...

9.1 Spelling

ILC uses international English spelling. Here we provide a few examples for guidance:

- il: fulfil (not fulfill)
- re: centre (not center)
- our: colour (not color)
- gue: catalogue (not catalog, but analog is used in electronics)
- mme: programme (not program, unless referring to a computer program)
- ell-: labelled (not labeled)
- ce/-se: licence (noun), license (verb), practice (noun), practise (verb)
- ise: organisation, authorise.

9.2 Punctuation

9.2.1 Hyphen

Hyphens are used to avoid ambiguity, for instance in attributive compound adjectives (compare 'a little used car' and 'a little-used car'), to distinguish between words such as 'reform' (change for the better) and 're-form' (form again), and to separate double letters to aid comprehension and pronunciation (e.g., co-operate).

Hyphens are also used if a prefix or suffix is added to a proper noun, symbol, or numeral, and in fractions: e.g., non-Fermi, 12-fold, three-quarters.

9.2.2 En dash

En dashes are used to mean ‘and’ (e.g., space–time, Sourian–Lagrange) or ‘to’ (e.g., 2011–2012, input–output ratio).

9.2.3 Em dash

An em dash is used as a parenthetical pause. Simply type with no space on either side (*Word* will automatically insert a thin space), e.g., ‘the experiment—due to begin in 2007—represents a major advance...’. In \LaTeX you can use `--` and `---` for entering an en dash, and an em dash, respectively.

9.2.4 Quotation marks

Double for true quotations, single for anything else.

Punctuation around quotation marks is achieved placing punctuation marks inside the quotation marks: the final document will be called a ‘Technical Design Report.’

9.2.5 Apostrophe

Do not use in plural acronyms (e.g., JFETs), decades (1990s). Do use in plural Greek letters and symbols (e.g., π ’s).

9.2.6 Colon, semi-colon, exclamation mark, question mark

Please note that in English these punctuation marks do not require a space before them.

9.3 Lists

In a series of three or more terms, use a comma (sometimes called the serial comma) before the final ‘and’ or ‘or’ (e.g., gold, silver, or copper coating). In a run-on list, do not introduce a punctuation mark between the main verb and the rest of the sentence. Avoid the use of bullet points.

For a displayed list there are two options:

- i) finish the introductory sentence with a colon, start the first item of the list with a lower-case letter, finish it with a semi-colon, and do the same for all items until the last, where a full stop is placed at the end of the text (as here);

- ii) finish the introductory sentence with a full stop, start the first item with a capital letter and finish it with a full stop, and the same for the remaining items.

9.4 Capitalisation

Capitalise adjectives and nouns formed from proper names, e.g., Gaussian. Exceptions to this rule include units of measure (amperes), particles (fermion), elements (einsteinium), and minerals (fosterite) derived from names. Capitalise only the name in Avogadro’s number, Debye temperature, Ohm’s law, Bohr radius.

Never capitalise lower-case symbols or abbreviations. When referring to article, paper, or report, column, sample, counter, curve, or type, do not capitalise.

9.4.1 Acronyms

In the first instance, spell out the acronym using capital letters for each letter used in the acronym, and provide the acronym in parentheses, e.g., Quark–Gluon Plasma (QGP).

9.5 Numbers

Spell out numbers 1 to 9 unless they are followed by a unit or are part of a series containing the number 10 or higher (as here); numbers are always in roman type. Numbers should always be written out at the beginning of a sentence.

9.6 Symbols

Names of particles, chemicals, waves or states, covariant couplings and monopoles, and mathematical abbreviations are written in roman type.

Symbols of variables (anything that can be replaced by a number) should be typed in *italics*.

Take care that this is consistent throughout the contribution.

9.7 Units

Symbols for units are printed in roman type. Symbols for units derived from proper names are written with capital letters (e.g., kelvin, 6 K). Write the unit out in full in cases such as ‘a few centimetres’. When using symbols insert a *non-breaking space* between the number and the unit, unless it is % or superscript, e.g., 10~cm, 100~GeV, 15~nb, but 20%, 27\$^\circ\$C. To help you typeset units correctly, Table 2 shows a set of predefined commands that are defined in the `siunitx` package. For instance,

the examples above could have been entered `\SI{10}{\cm}`, `\SI{100}{\GeV}`, etc., where these commands work both in text or math mode. These `\SI{}{}` commands typeset a non-breaking space preceding the unit.

Table 2: Examples of some commonly used units and numbers for the TDR

<i>Commands available in math and text mode</i>	<i>Result as printed</i>
<code>\SI{2d34}{cm^{-2}.s^{-1}}</code>	$2 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$
<code>\SI{31}{\km}</code>	31 km
<code>\SI{31.5}{\mega\volt\per\metre}</code> or <code>\SI{31.5}{\mega\volt/\metre}</code>	31.5 MV m ⁻¹ or 31.5 MV/m
<code>\SI{200}{\micro\metre}</code> or <code>\SI{200}{\um}</code>	200 μm
<code>\SI{75}{\percent}</code>	75 %
<code>\num{2.5e10}</code>	2.5×10^{10}
<code>\si[inter-unit-product={}\cdot]{5.0}{\micro\metre\rad}</code>	5.0 μm · rad

The complete list of abbreviations for the most commonly used units can be found at <http://www.math.washington.edu/tex-archive/macros/latex/contrib/siunitx/siunitx.pdf>.

A Using LaTeX and making your contribution available

The TDR class file loads a number of external packages, as well as some TDR-specific extensions. You need a recent L^AT_EX setup (such as T_EXlive 2010, see the TUG Web site <http://www.tug.org> for details) to fully exploit its possibilities.

Please contact the editors to determine the best way to submit your contribution. Please submit the L^AT_EX file and **separate files** for each of the figures and the bibliography.

B Predefined commands

The TDR L^AT_EX class files have predefined commands for often-occurring abbreviations of markup entities. Table 3 gives a list. The SI-unit commands provide the non-breaking space between the value and the unit's name. The complete list can be found at <http://www.math.washington.edu/tex-archive/macros/latex/contrib/siunitx/siunitx.pdf>.

Table 3: Examples of predefined commands

<i>Commands available in text mode</i>	<i>Result as printed</i>
text <code>\eg</code> more text	text e.g., more text
text <code>\etc</code> , more text	text etc., more text
text <code>\ie</code> more text	text i.e., more text
text <code>\cf</code> more text	text <i>cf.</i> more text
text <code>\etal</code>	text <i>et al.</i>
text <code>\edms{000000012345}</code>	text EDMS ID: 000000012345
text <code>\ilcdoc{ILC-REPORT-2011-030}{32863}</code>	text ILC-REPORT-2011-030
text <code>\jacow{012345}</code>	text JACoW: 012345
text <code>\arxiv{012345}</code>	text arXiv: 012345
<i>Commands for cross-referencing (text mode)</i>	<i>Result as printed</i>
<code>\Eq[b]~(\ref{eq:einstein})</code> and <code>\Eref{eq:euler}</code>	Equation (1) and Eq. (2)
<code>\Figure[b]~\ref{fig:cern}</code> and <code>\Fref{fig:fermi}</code>	Figure 3 and Fig. 4
<code>\Bref[b]{bib:top}</code> and <code>\Refs~\cite{bib:ref1,bib:ref2}</code>	Reference [3] and Refs [6–7]
<code>\Sref{sec:intro}</code> and <code>\Sections~\ref{sec:sun}--\ref{sec:moon}</code>	Section 1 and Sections 3.4–3.6
<code>\Tref{tab:sym}</code> and <code>\Tables~\ref{tab:top}--\ref{tab:charm}</code>	Table 4 and Tables 5–6
<i>Commands available in math and text mode</i>	<i>Result as printed</i>
<i>Units</i>	
<code>\SI{3}{\metre}</code> and <code>\$\$\SI{3}{\metre}\$\$</code>	3 m and 3 m
<code>\SI{1}{\GeV}</code> and <code>\$\$\SI{1}{\GeV}\$\$</code>	1 GeV and 1 GeV
<code>\SI{1}{\TeV}</code> and <code>\$\$\SI{1}{\TeV}\$\$</code>	3 TeV and 3 TeV
<code>\SI{3}{kg.m/s^2}</code> and <code>\$\$\SI{3}{kg.m/s^2}\$\$</code>	3 kg m/s ² and 3 kg m/s ²

C Things to do and not do when preparing your L^AT_EX contribution

When submitting a L^AT_EX source file to an editor, it is very important that the L^AT_EX source of the contribution be readable and understandable to the various people who have to intervene in the editorial process.

C.1 Make your source easy to read and maintain

In order to make life easier for yourself as well as for the editors who will have to deal with your source file, we invite authors to take into account the following general suggestions.

- Use, as far as possible, only basic L^AT_EX commands, including those of the packages that are loaded by the TDR.cls. In particular, for graphics inclusion, use the `\includegraphics`.

- Do not use \TeX commands, but their \LaTeX equivalents. In particular, `\def` should never be used to (re)define commands, since there exists `\newcommand`, or `\providecommand`, which will issue an error message if the command name is already in use. Basic \LaTeX commands or environment should **never** be redefined. If you need to (re)define a command or add a new abbreviation, please contact the Technical Editors.
- Do not use `$$` for delimiting a display math formula, but use the \LaTeX construct `\[... \]`, instead. More generally, numbered equations can be produced with the `equation` environment, with `equation*` its unnumbered variant.
- Do not replace \LaTeX environments by commands.
- Do not use \TeX 's state changing font commands `{\rm ...}`, `{\it ...}`, `{\bf ...}`, etc., but use the \LaTeX equivalents: in text mode `\textrm{...}`, `\emph{...}`, `\textbf{...}`, and inside math mode, `\mathrm{...}`, `\mathit{...}`, `\mathbf{...}`, etc.
- Do not reference equations, sectioning commands, figures, or tables by explicit, hard-coded numbers in your source, but use \LaTeX 's cross-reference mechanism, using a mnemonic key to identify each structural element clearly (see Section 8).
- Do not redefine \LaTeX 's basic counters, such as `equation`, `section`, etc. Numbering of such elements is defined by the TDR class file and should not be modified by the authors, who should use only \LaTeX 's cross-reference mechanism to refer to equations, figures, tables, etc. (see Section 8).