Elsevier instructions for the preparation of a 2-column format camera-ready paper in LaTeX

P. de Groot[a*], R. de Maas[a†], X.-Y. Wang[b] and A. Sheffield[a‡]

[a]Mathematics and Computer Science Section, Elsevier Science B.V.,
P.O. Box 103, 1000 AC Amsterdam, The Netherlands

[b]Economics Department, University of Winchester,
2 Finch Road, Winchester, Hampshire P3L T19, United Kingdom

These pages provide you with an example of the layout and style for 100% reproduction which we wish you to adopt during the preparation of your paper. This is the output from the LaTeX document class you requested.

1. FORMAT

Text should be produced within the dimensions shown on these pages: each column 7.5 cm wide with 1 cm middle margin, total width of 16 cm and a maximum length of 19.5 cm on first pages and 21 cm on second and following pages. The LaTeX document class uses the maximum stipulated length apart from the following two exceptions (i) LaTeX does not begin a new section directly at the bottom of a page, but transfers the heading to the top of the next page; (ii) LaTeX never (well, hardly ever) exceeds the length of the text area in order to complete a section of text or a paragraph. Here are some references: [1,2].

1.1. Spacing

We normally recommend the use of 1.0 (single) line spacing. However, when typing complicated mathematical text LaTeX automatically increases the space between text lines in order to prevent sub- and superscript fonts overlapping one another and making your printed matter illegible.

1.2. Fonts

These instructions have been produced using a 10 point Computer Modern Roman. Other recommended fonts are 10 point Times Roman, New Century Schoolbook, Bookman Light and Palatino.

2. PRINTOUT

The most suitable printer is a laser or an inkjet printer. A dot matrix printer should only be used if it possesses an 18 or 24 pin printhead ("letter-quality").

The printout submitted should be an original; a photocopy is not acceptable. Please make use of good quality plain white A4 (or US Letter) paper size. *The dimensions shown here should be strictly adhered to: do not make changes to these dimensions, which are determined by the document class.* The document class leaves at least 3 cm at the top of the page before the head, which contains the page number.

Printers sometimes produce text which contains light and dark streaks, or has considerable lighting variation either between left-hand and right-hand margins or between text heads and bottoms. To achieve optimal reproduction quality, the contrast of text lettering must be uniform,

*Footnotes should appear on the first page only to indicate your present address (if different from your normal address), research grant, sponsoring agency, etc. These are obtained with the `\thanks` command.

†For following authors with the same address use the `\addressmark` command.

‡To reuse an addressmark later on, label the address with an optional argument to the `\address` command, e.g. `\address[MCSD]`, and repeat the label as the optional argument to the `\addressmark` command, e.g. `\addressmark[MCSD]`.

sharp and dark over the whole page and throughout the article.

If corrections are made to the text, print completely new replacement pages. The contrast on these pages should be consistent with the rest of the paper as should text dimensions and font sizes.

3. TABLES AND ILLUSTRATIONS

Tables should be made with LaTeX; illustrations should be originals or sharp prints. They should be arranged throughout the text and preferably be included *on the same page as they are first discussed*. They should have a self-contained caption and be positioned in flush-left alignment with the text margin within the column. If they do not fit into one column they may be placed across both columns (using `\begin{table*}` or `\begin{figure*}` so that they appear at the top of a page).

3.1. Tables

Tables should be presented in the form shown in Table 1. Their layout should be consistent throughout.

Horizontal lines should be placed above and below table headings, above the subheadings and at the end of the table above any notes. Vertical lines should be avoided.

If a table is too long to fit onto one page, the table number and headings should be repeated above the continuation of the table. For this you have to reset the table counter with `\addtocounter{table}{-1}`. Alternatively, the table can be turned by 90° ('landscape mode') and spread over two consecutive pages (first an even-numbered, then an odd-numbered one) created by means of `\begin{table}[h]` without a caption. To do this, you prepare the table as a separate LaTeX document and attach the tables to the empty pages with a few spots of suitable glue.

3.2. Useful table packages

Modern LaTeX comes with several packages for tables that provide additional functionality. Below we mention a few. See the documentation of the individual packages for more details. The packages can be found in LaTeX's `tools` directory.

`array` Various extensions to LaTeX's `array` and `tabular` environments.

`longtable` Automatically break tables over several pages. Put the table in the `longtable` environment instead of the `table` environment.

`dcolumn` Define your own type of column. Among others, this is one way to obtain alignment on the decimal point.

`tabularx` Smart column width calculation within a specified table width.

`rotating` Print a page with a wide table or figure in landscape orientation using the `sidewaystable` or `sidewaysfigure` environments, and many other rotating tricks. Use the package with the `figuresright` option to make all tables and figures rotate in clockwise. Use the starred form of the `sideways` environments to obtain full-width tables or figures in a two-column article.

3.3. Line drawings

Line drawings may consist of laser-printed graphics or professionally drawn figures attached to the manuscript page. All figures should be clearly displayed by leaving at least one line of spacing above and below them. When placing a figure at the top of a page, the top of the figure should align with the bottom of the first text line of the other column.

Do not use too light or too dark shading in your figures; too dark a shading may become too dense while a very light shading made of tiny points may fade away during reproduction.

All notations and lettering should be no less than 2 mm high. The use of heavy black, bold lettering should be avoided as this will look unpleasantly dark when printed.

3.4. PostScript figures

Instead of providing separate drawings or prints of the figures you may also use PostScript files which are included into your LaTeX file and printed together with the text. Use

Table 1
The next-to-leading order (NLO) results *without* the pion field.

Λ (MeV)	140	150	175	200
r_d (fm)	1.973	1.972	1.974	1.978
Q_d (fm^2)	0.259	0.268	0.287	0.302
P_D (%)	2.32	2.83	4.34	6.14
μ_d	0.867	0.864	0.855	0.845
$\mathcal{M}_{\rm M1}$ (fm)	3.995	3.989	3.973	3.955
$\mathcal{M}_{\rm GT}$ (fm)	4.887	4.881	4.864	4.846
$\delta_{\rm 1B}^{\rm VP}$ (%)	−0.45	−0.45	−0.45	−0.45
$\delta_{\rm 1B}^{\rm C2:C}$ (%)	0.03	0.03	0.03	0.03
$\delta_{\rm 1B}^{\rm C2:N}$ (%)	−0.19	−0.19	−0.18	−0.15

The experimental values are given in ref. [4].

one of the packages from LaTeX's `graphics` directory: `graphics`, `graphicx` or `epsfig`, with the `\usepackage` command, and then use the appropriate commands (`\includegraphics` or `\epsfig`) to include your PostScript file.

The simplest command is:
`\includegraphics{file}`, which inserts the PostScript file `file` at its own size. The starred version of this command:
`\includegraphics*{file}`, does the same, but clips the figure to its bounding box.

With the `graphicx` package one may specify a series of options as a key–value list, e.g.:

```
\includegraphics[width=15pc]{file}
\includegraphics[height=5pc]{file}
\includegraphics[scale=0.6]{file}
\includegraphics[angle=90,width=20pc]{file}
```

See the file `grfguide`, section "Including Graphics Files", of the `graphics` distribution for all options and a detailed description.

The `epsfig` package mimicks the commands familiar from the package with the same name in LaTeX2.09. A PostScript file `file` is included with the command `\psfig{file=file}`.

Grey-scale and colour photographs cannot be included in this way, since reproduction from the printed CRC article would give insufficient typographical quality. See the following subsections.

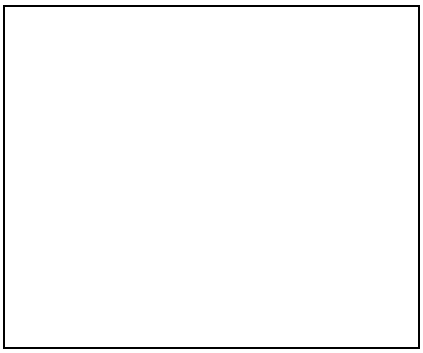

Figure 1. Good sharp prints should be used and not (distorted) photocopies.

3.5. Black and white photographs

Photographs must always be sharp originals (*not screened versions*) and rich in contrast. They will undergo the same reduction as the text and should be pasted on your page in the same way as line drawings.

3.6. Colour photographs

Sharp originals (*not transparencies or slides*) should be submitted close to the size expected in publication. Charges for the processing and printing of colour will be passed on to the author(s) of the paper. As costs involved are per

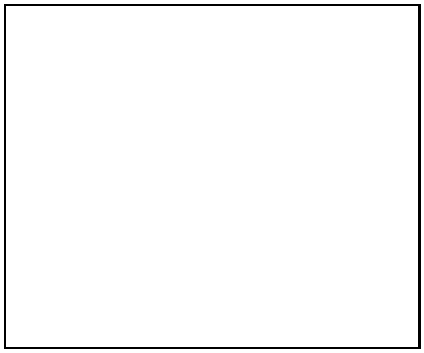

Figure 2. Remember to keep details clear and large enough.

page, care should be taken in the selection of size and shape so that two or more illustrations may be fitted together on one page. Please contact the Author Support Department at Elsevier (E-mail: `authorsupport@elsevier.nl`) for a price quotation and layout instructions before producing your paper in its final form.

4. EQUATIONS

Equations should be flush-left with the text margin; LaTeX ensures that the equation is preceded and followed by one line of white space. LaTeX provides the document class option `fleqn` to get the flush-left effect.

$$H_{\alpha\beta}(\omega) = E_{\alpha}^{(0)}(\omega)\delta_{\alpha\beta} + \langle\alpha|W_{\pi}|\beta\rangle \tag{1}$$

You need not put in equation numbers, since this is taken care of automatically. The equation numbers are always consecutive and are printed in parentheses flush with the right-hand margin of the text and level with the last line of the equation. For multi-line equations, use the `eqnarray` environment.

For complex mathematics, use the $\mathcal{AMS}$math package. This package sets the math indentation to a positive value. To keep the equations flush left, either load the `espcrc` package *after* the $\mathcal{AMS}$math package or set the command `\mathindent=0pt` in the preamble of your article.

REFERENCES

1. S. Scholes, Discuss. Faraday Soc. No. 50 (1970) 222.
2. O.V. Mazurin and E.A. Porai-Koshits (eds.), Phase Separation in Glass, North-Holland, Amsterdam, 1984.
3. Y. Dimitriev and E. Kashchieva, J. Mater. Sci. 10 (1975) 1419.
4. D.L. Eaton, Porous Glass Support Material, US Patent No. 3 904 422 (1975).

References should be collected at the end of your paper. Do not begin them on a new page unless this is absolutely necessary. They should be prepared according to the sequential numeric system making sure that all material mentioned is generally available to the reader. Use `\cite` to refer to the entries in the bibliography so that your accumulated list corresponds to the citations made in the text body.

Above we have listed some references according to the sequential numeric system [1–4].