

Please note that these guidelines do not apply to journals of the American Astronomical Society. Guidelines for these journals are available [online](#).

How to prepare and submit an article for publication in an IOP journal using Microsoft Word

Author(s) name(s)

Author Affiliation(s)

E-mail: corresponding author e-mail address

Abstract. The abstract text should be formatted using 10 point Times (or Times Roman, or Times New Roman) and indented by about 25 mm from the left margin. Leave about 10 mm space after the abstract before you begin the main text of your article. The abstract follows the addresses.

1. Introduction: file preparation and submission

These guidelines give some suggestions on how to prepare and format your manuscript using Microsoft Word. It is *not* necessary to try to produce pages that look like published journal pages, the detailed design (typesetting) work will be undertaken by IOP as part of the production process.

1.1. What you will need to supply

Full details on how to submit files to a particular IOP journal are contained in the document [Guidelines for authors](#) which is discussed in section 1.4. Here we mention the key points you need to consider when preparing your files for submission. You will need to prepare and supply the following:

- **Text.** The text (Word .doc file) of your article with all the figures *embedded*. Refer to appendix A for more information about embedding graphics in a Word document. You can supply a PDF file of your paper but you must also supply the original Word file with embedded graphics *and* separate graphics files where possible.
- **Figures.** In addition to the figures being embedded in the text (Word file) of your article, you are asked, where possible, to supply all figures as separate graphics files in any of the following file formats:
 - EPS, PDF, WMF, TIFF, GIF, JPEG and BMP.

Please name all figure files using the guidelines in section 1.2.1. For more details on preparing figures please refer to IOP's graphics guidelines, [Preparing graphics for IOP journals](#), which can be downloaded from authors.iop.org.

- **Details of any copyright permissions.** If you wish to illustrate your article using material for which you do not own the copyright then you **must** seek permission from the copyright holder, usually both the author and the publisher. It is the author's responsibility to obtain copyright permissions and this should be done prior to submitting your article. If you have obtained permission, please provide full details of the permission granted—for example, copies of the text of any e-mails or a copy of any letters you may have received. Figure captions must include an acknowledgment of the original source of the material even when permission to use has been obtained. Full details on copyright can be found in IOP's [Guidelines for authors](#).

1.2. Naming your files

Please name all your files, both figures and text as follows.

- use only characters from the set a to z, A to Z, 0 to 9 and underscore (_);
- do not use spaces in file names;
- include an extension to indicate the file type (e.g., .doc, .txt, .eps, etc);
- do not use any accented characters; for example, à, ê, ñ, ö, ý, etc because these can cause difficulties when processing your files.

1.2.1. Naming your figure files. In addition to the above points, please give each figure file a name which is the same as the figure it contains; for example, figure1.eps, figure2.tif, figure2a.gif etc. If the figure file contains a figure with multiple parts, for example figure 2(a) to 2(e), give it a name such as figure2a_2e.jpg, and so forth.

1.3. Submitting your article files to an IOP journal

For most IOP journals you send your files directly to us by web, e-mail or FTP; however, there are a number of exceptions to this. For certain IOP journals you need to send your files to a different institution or to an external editor. How to find the submission address for a particular journal is discussed in section 1.4, below.

1.4. Where to send your files

Full details of how to submit files to a particular IOP journal are contained in the document [Guidelines for authors](#) which can be accessed online by going to authors.iop.org. From this document's table of contents, select the 'How to submit' link to access full details of the submission address for a particular journal.

2. The title, author list and abstract

2.1. The title

The first letter of the title should be capitalized with the rest in lower case. The title should be formatted using 17 point Times Bold, flush left and unjustified, and you should leave 28 mm of space above, and 10 mm below, the title. Many database systems used in literature searches rely heavily on the content of titles and abstracts to identify relevant articles so great care should be taken in constructing both.

2.2. Running heads

The title of your article should be used as the running head of your article. If the title is too long, please use a short version of the title that can also be used in the final print version of your article.

2.3. Author list

Include all authors in a single list. The style for the names is: initials (without full stops) or forenames and family name, each author's name separated with a comma, precede the final name with 'and' (see the example in section 2.4). Chinese-style names should be typed as the author wishes his/her name to appear in print.

2.4. Addresses and footnotes

The addresses of the authors' affiliations follow the list of authors. If the authors are at different addresses, numbered superscripts should be used after each family name to indicate his/her address. The numbered superscripts should *not* be inserted using Word's footnote command because this will place the reference in the wrong place—at the bottom of the page (or end of the document) rather than next to the address. A footnote, linked to the author, should be used to indicate an alternate address or

the author to whom correspondence should be addressed. Ensure that numbered superscripts used to link author names and addresses start at 1 and continue on to the number of affiliations. Do not add any footnotes until all the author names are linked to the addresses. For example, to format

G M Douglas^{1,3}, J E Thomas^{1,4} and A J Cox^{2,5}

where there are three addresses, you should insert superscripts 1, 2 and 3 to link family names to addresses and then insert *footnotes* 4 and 5. Note that the first footnote in the main text will now be number 6.

2.5. E-mail addresses

These may be added after the authors' addresses.

2.6. The abstract

The abstract follows the addresses and should give readers concise information about the content of the article and indicate the main results obtained and conclusions drawn. It should be self-contained with no reference to figures, tables, equations or bibliographic references and should not normally exceed 200 words. The abstract should normally be restricted to a single paragraph.

2.7. Keywords

Keywords should be provided for submissions to *Measurement Science and Technology*, *Physical Biology*, *Physiological Measurement* and both parts of *Journal of Optics*. Add these as a new paragraph after the abstract.

2.8. Subject classification numbers

Physics and Astronomy Classification System (PACS) codes or Mathematics Subject Classification (MSC) scheme numbers should come immediately after the abstract. Classification codes can greatly help in the choice of suitable referees and allocation of articles to subject areas. For *Inverse Problems* and *Nonlinearity* you may use *either* PACS *or* MSC codes.

2.8.1. *Information on PACS and MSC.* For more information on PACS and MSC see

- **MSC:** <http://www.ams.org/msc>
- **PACS:** <http://www.aip.org/pacs>

2.8.2. *Submitted to.* The full title of the journal submitted to can be inserted on a new line after any classification numbers; although this information is helpful, it is not essential.

3. Formatting the text

The text may be divided into sections, subsections and, where necessary, subsubsections.

3.1. Fonts

Please format the text of your article using a 'Times' font at a size of 11 points. Note that you may need to use 'Times Roman' or 'Times New Roman' depending on the fonts installed on your computer.

3.2. Formatting sections, subsections and subsubsections

The first section is normally an introduction, which should state clearly the object of the work, its scope and the main advances reported, with brief references to relevant results by other workers.

3.2.1. *Style, spacing and numbering.* Table 1 shows our preferred format for section headings.

Table 1. Formatting sections, subsections and subsubsections.

	Numbering	Font	Spacing
Section	1., 2., 3., etc	11 point Times bold	1 line space before a section No additional space after a section heading
Subsection	2.1., 2.2., 2.3., etc	11 point <i>Times Italic</i>	1 line space before a subsection No space after a subsubsection heading
Subsubsection	2.3.1., 2.3.2., etc	11 point <i>Times Italic</i>	Subsubsections should end with a full stop (period) and run into the text of the paragraph

3.3. Acknowledgments

If you wish to acknowledge assistance or encouragement from colleagues, special work by technical staff or financial support from organizations you should do so in an unnumbered ‘Acknowledgments’ section immediately following the last numbered section of the article.

3.4. Appendices

Technical detail that it is necessary to include, but that interrupts the flow of the article, may be included as an appendix. Appendices should be included at the end of the main text of the article, after the acknowledgments but before the reference list. If there are two or more appendices they should be called Appendix A, Appendix B, etc. Numbered equations will be in the form (A.1), (A.2), etc, figures will appear as figure A1, figure B1, etc and tables as table A1, table B1, etc.

3.5. Some style points

It will help readers if your article is written in a clear, consistent and concise manner. The Production Department at IOP will try to make sure that your work is presented to readers in the best possible way without sacrificing the individuality of your writing. Some recommended points to note, however, are the following.

- Please use ‘ize’ endings rather than ‘ise’ (diagonalize, renormalization, minimization, etc), however, there are some common exceptions to this, for example: devise, promise and advise.
- English spellings are mandatory (colour, flavour, behaviour, tunnelling, artefact, focused, focusing, fibre, etc) *except* in the following journals where *either* American *or* English spellings are acceptable: *Physical Biology*, *Smart Materials and Structures* and *Journal of Micromechanics and Microengineering*.
- The words table and figure should be written in full and **not** abbreviated.

Please check your article carefully for accuracy, consistency and clarity before submission. Remember that your article will be read by many people whose native language is not English and who may not therefore be aware of many of the subtle meanings of words or idiomatic phrases present in the English language. It therefore helps if you try to keep sentences as short and simple as possible.

3.6. Footnotes

Footnotes should only be used when essential, and if required should be used only for brief notes that do not fit conveniently into the text.

4. Figures

Each figure should have a brief caption describing it and, if necessary, a key to interpret the various lines and symbols on the figure. Aim to keep the lettering on figures to a minimum and include as much detail as necessary in the captions.

4.1. IOP graphics guidelines

Separate guidelines on preparing figure files, [Preparing graphics for IOP journals](#), can be downloaded from authors.iop.org.

4.2. Figure captions/numbering

Captions should be placed below (or next to) the figure and should finish with a full stop (period). Figures should be numbered sequentially—‘Figure 1’, ‘Figure 2’, and should be cited in the text as ‘figure 1’, ‘figure 2’.

4.3. Supplying figure files

Please note that all figures must be embedded within the text (Word document) of your article *and* supplied as separate figure files in any one of the acceptable file formats listed in section 1.1 (you can, of course, use any combination of the supported formats). See appendix A and IOP’s graphics guidelines, *Preparing graphics for IOP journals*, for detailed instructions.

4.4. Text in figures

Do not put a title or caption detail in the figure file; any description should be placed in the figure caption. Please refer to IOP’s graphics guidelines, *Preparing graphics for IOP journals*, for more specific information about fonts/text in EPS figure files.

4.5. Scaling of line widths and text

You should note that as part of the production and typesetting processes, figures may be resized to fit the design of the journal. Scaling of graphics will, of course, affect line thickness and text size in the figures. To achieve the best results you are advised to prepare your figures at approximately the size they will be reproduced in the journal. Refer to recent printed or electronic copies of the appropriate journal to determine the size at which figures are typically reproduced.

4.6. Naming your graphics files

Please follow the file naming guidelines in section 1.2.1 and give each graphics file a name which *easily identifies the content*. For example: Figure1.eps, Figure2a.tif, Figure2b.tif rather than long descriptive names such as deltacurvevariation.eps.

4.7. Colour illustrations

Use of colour in the *online* version of your article is free and you are strongly encouraged to make good use of colour where it will help readers of your article. The use of colour in figure files is discussed in IOP’s graphics guidelines, *Preparing graphics for IOP journals*, but please remember that *colour in the print version usually has to be paid for*.

4.8. Positioning figures

Individual figures should normally be centred. It is also more convenient for referees of your article if figures are placed as close as possible, and ideally after, the point where they are first mentioned in the text. If necessary, figures and their captions can be grouped together at the end of the article.

4.9. Figures in parts

If a figure has parts these should be clearly labelled as (a), (b), (c) etc on the figure. Parts should not have separate captions, but the caption should describe the different parts.

5. Supplementary data

All of our journals encourage authors to submit supplementary data attachments to enhance the online versions of published articles. Supplementary data enhancements typically consist of video clips, animations or data files, tables of extra information or extra figures. They can add to the reader's understanding and present results in attractive ways that go beyond what can be presented in the print version of the journal. The printed journal remains the archival version, and supplementary data items are supplements which enhance a reader's understanding of the article but are not essential to that understanding. For electronic-only journals, supplementary data attachments may be used to convey essential information. Further guidelines on supplementary data are contained in IOP's [Guidelines for authors](#) which can be accessed online by going to authors.iop.org and selecting the 'Supplementary data' link in the table of contents.

6. Tables

6.1. Positioning tables

Tables should be centred unless they occupy the full width of the page.

6.2. Table captions/numbering

Captions should be placed at the top of the table and should finish with a full stop (period). Narrow captions should be centred, longer captions simply typed as a paragraph. Tables should be numbered sequentially—'Table 1', 'Table 2', and should be cited in the text as 'table 1', 'table 2'.

6.3. Rules in tables

Tables should have only horizontal rules and no vertical ones. Generally, only three rules should be used: one at the top of the table, one at the bottom, and one to separate the entries from the column headings.

6.4. Example

Because tables can take so many forms, it is difficult to provide detailed guidelines; however, the following example (and other tables in these guidelines) demonstrates our preferred style.

Table 2. A simple table.

Distance (m)	Velocity (ms ⁻¹)
100	23.56
150	34.64
200	23.76

6.5. Notes to tables

If you wish to format a table so that it contains notes (table footnotes) to the entries within the body of the table these notes should be formatted using alphabetic superscripts i.e. ^a, ^b, ^c. Notes should be placed at the bottom of the table; one convenient method is to create an empty row at the bottom of the table to contain them. Merge the cells to give you a single cell the width of the table. Table notes should be 10 point Times Roman. Each note should be on a separate line.

Table 3. A table with headings spanning two columns and containing notes^a.

Nucleus	Thickness (mg cm ⁻²)	Composition	Separation energies	
			γ , n (MeV)	γ , 2n (MeV)
¹⁸¹ Ta	19.3±0.1 ^b	Natural	7.6	14.2
²⁰⁸ Pb	3.8±0.8 ^c	99% enriched	7.4	14.1
²⁰⁹ Bi	2.6±0.01 ^c	Natural	7.5	14.4

^a Notes are referenced using alphabetic superscripts.

^b Self-supporting.

^c Deposited over Al backing.

7. Equations and mathematics

Mathematics should be prepared using Word's built-in 'Equation Editor' or the full MathType product.

Avoid 'Insert Symbol'

Please *avoid* using Word's 'Insert Symbol' command. Symbols inserted in this way may not appear in the PostScript and PDF file of your article—they often 'drop out'. Instead, for example, to type Greek characters, type the corresponding Latin character (e.g., 'a' for α) and manually change the font to Symbol using *Format* → *Font* and then select 'Symbol' font.

7.1. Fonts in Equation Editor (or MathType)

Make sure that your Equation Editor or MathType fonts, including sizes, are set up to match the text of your document. Please refer to appendix B for more information.

7.2. Points of style

7.2.1. *Vectors*. Bold italic characters is our preferred style but you may use any standard notation; for example, any of these styles for vectors is acceptable:

'the vector cross product of ***a*** and ***b*** is given by ***$\mathbf{a} \times \mathbf{b}$*** ...', or

'the vector cross product of ***a*** and ***b*** is given by ***$\mathbf{a} \times \mathbf{b}$*** ...', or

'the vector cross product of ***\vec{a}*** and ***\vec{b}*** is given by ***$\vec{a} \times \vec{b}$*** ...'.

7.2.2. *Roman and italic in mathematics*.

- Use a Roman d for a differential d, for example, $\tan \theta = dy/dx$.
- Use a Roman e for an exponential e; for example, $y = e^x$.
- Use a Roman i for the square root of -1; e.g., $i = \sqrt{-1}$.
- Certain other common mathematical functions, such as cos, sin, det and ker, should appear in Roman type.
- Subscripts and superscripts should be in Roman type if they are labels and italic if they are variables or characters that take values. For example in the equation $\epsilon_m = -g\mu_n Bm$, *m*, the *z* component of the nuclear spin, is italic because it can have different values whereas n is Roman because it is a label meaning nuclear.

7.3. Alignment of mathematics

If your article is accepted for publication the mathematical content will be carefully typeset during the production process to the standard and style of IOP journals. Therefore, for the initial submission, you may simply centre all equations. Long equations that need to be continued on subsequent lines, should

start flush left, continuation lines should be indented by about 25 mm. Equations should be split at mathematically sound points, immediately before =, + or – signs or between terms multiplied together. The connecting signs are not repeated and appear only at the beginning of the turned-over line. A multiplication sign should be added to the start of turned-over lines where the break is between two multiplied terms.

7.3.1. Displayed equations: examples.

$$\phi_k(\vec{r}) = (2\pi)^{2/3} \exp(i\vec{k} \cdot \vec{r}) \quad (1)$$

$$\begin{aligned} C(12) &= [\vec{\pi}(x) \cdot \vec{\phi}(x+r)] \\ &\approx 1 - \text{const} \frac{r^2}{L^2} \int_r^L \frac{xdx}{x^2} + \dots \\ &\approx 1 - \text{const} \frac{r^2}{L^2} \ln\left(\frac{L}{r}\right) + \dots \end{aligned} \quad (2)$$

However, if equations will fit on one line, do so; for example, (2) may also be formatted as:

$$C(12) = [\vec{\pi}(x) \cdot \vec{\phi}(x+r)] \approx 1 - \text{const} \frac{r^2}{L^2} \int_r^L \frac{xdx}{x^2} + \dots \approx 1 - \text{const} \frac{r^2}{L^2} \ln\left(\frac{L}{r}\right) + \dots \quad (3)$$

7.4. Miscellaneous points

- Except for simple examples, exponential expressions, especially those containing subscripts or superscripts, are clearer if the notation $\exp(\dots)$ is used. For instance, $\exp[i(kx - \omega t)]$ and $\exp(z^2)$ are preferred to $e^{i(kx - \omega t)}$ and e^{z^2} , but e^2 is acceptable. Similarly, the square root sign $\sqrt{\quad}$ should only be used with relatively simple expressions, e.g. $\sqrt{2}$ and $\sqrt{a^2 + b^2}$, but in other cases the power $1/2$ should be used.
- A two-line solidus should be avoided where possible; for example, use $\frac{1}{M_a} \left(\int_0^\infty d\omega \frac{|S_0|^2}{N} \right)^{-1}$ instead of $\frac{1}{M_a} / \int_0^\infty d\omega \frac{|S_0|^2}{N}$
- It is important to distinguish between $\ln = \log_e$ and $\lg = \log_{10}$.
- Braces, brackets and parentheses should be used in the following order: $\{\{()\}$. The same ordering of brackets should be used within each size. However, this ordering can be ignored if the brackets have a special meaning (e.g. if they denote an average or a function).
- Decimal fractions should always be preceded by a zero: for example 0.123 *not* .123 (note, do not use commas, use decimal points).
- Equations that are referred to in the text should be numbered with the number on the right-hand side.

7.5. Equation numbering

Equations should be numbered sequentially throughout the text (i.e., (1), (2), (3), ...) or numbered by section (i.e., (1.1), (1.2), (2.1), ...) depending on your preference. In articles with several appendices equation numbering by section is useful in the appendices even when sequential numbering has been

used throughout the main body of the text: for example, A.1, A.2, ..., B.1, B.2, When referring to an equation in the text:

- always put the equation number in brackets—e.g. ‘as in (2)’ or ‘as in (2.1)’;
- it is not normally necessary to include the word ‘equation’ before the number.

8. References

8.1. General

As part of the production system for IOP journals, online versions of references will, wherever possible, be linked electronically using IOP’s HyperCite™ technology. What this means is that readers of your article will be able to link from the references to the abstract or full text of the cited articles. Whether a particular reference can be linked will depend on what type of publication it is (journal articles are more likely to be linked than books and reports) and when it was published. In order to link as many of your references as possible, it is important that your references are accurate, complete and formatted using the guidelines below. The time and effort spent in preparing your reference list is extremely worthwhile and is one way to enhance your article.

8.2. What should a reference contain?

A complete reference should provide the reader with enough information to locate the article concerned, whether published in print or electronic form, and should, depending on the type of reference, consist of:

- family name(s) and initials of all authors;
- titles of journal articles (optional);
- year of publication;
- title of journal, book or other publication;
- volume number;
- editor(s), if any;
- town of publication and publisher for *books*;
- page numbers.

8.3. Types of reference

The structure of a particular reference depends on whether it is:

- to a printed journal article;
- to an electronic journal article;
- to a preprint (e.g., ArXiv);
- to a book, conference proceeding or report.

8.4. Reference lists

The reference list comes at the end of an article and consists of an *unnumbered* ‘References’ section containing references sorted according to the Harvard (alphabetic) or Vancouver (numeric) referencing style.

- All author’s names should be given except where there are more than ten when only the first should be given followed by *et al.*
- Names of collaborations should be included, e.g. Thomas J E *et al* (for the FFAST Collaboration).
- If you are unsure of the correct abbreviation for a journal title it is best to leave the title in full.

The terms *loc. cit.* and *ibid* should not be used.

- Unpublished conferences and reports should generally not be included in the reference list if they are in a published form elsewhere.
- Articles in the course of publication should have an article title, the journal submitted to or a preprint number.
- A thesis submitted for a higher degree (giving the name of the institution where the work was done) may be included in the reference list if it has not been superseded by a published article and is available through a library.

8.5. Harvard and Vancouver reference styles

Two different styles of referencing are in common use: the Harvard (alphabetic) system and the Vancouver (numeric) system. All IOP journals allow the use of the Harvard *or* Vancouver system (you can use the style you prefer), **apart from** the following journals:

- *Physics in Medicine and Biology* and
- *Physiological Measurement*

for which the Harvard system must be used.

8.5.1. Harvard system. Using the Harvard system, the name of the author appears in the text together with the year of publication. Either the year or the name and year are in parentheses, depending on the context. Some points of style are

- Where there are only two authors both names should be given in the text; if there are more than two authors only the first name should appear followed by *et al.*
- When two or more references to work by one author or the same group of authors occur for the same year they should be identified by including a, b, etc after the year (e.g. 1986a).
- If several references to different pages of the same article occur the appropriate page number may be given in the text, for example Kitchen (1982, p 39).

Examples:

Binzoni T, Leung T S, Boggett D and Delpy D T 2002 A new near infrared laser-Doppler flowmeter for deep tissue perfusion monitoring *MAGMA* **14** 74–5
 Binzoni T, Leung T S, Boggett D and Delpy D T 2003 Non-invasive laser Doppler perfusion measurements of large tissue volumes and human skeletal muscle blood RMS velocity *Phys. Med. Biol.* **48** 2527–49
 Kendall M A F and Quinlan N J 2004 Intradermal ballistic delivery of micro-particles into excised human skin for drug and vaccine applications *J. Biomech.* **37** 1733–41
 Kendall M A F, Quinlan N J, Thorpe S J, Ainsworth R W and Bellhouse B J 2004a Measurements of the gas and particle flow within a converging-diverging nozzle for high speed powdered vaccine and drug delivery *Exp.Fluids* **37** 128–36
 Kendall M A F, Rishworth S, Carter F and Mitchell T 2004b Effects of relative humidity and temperature on the ballistic delivery of micro-particles to excised porcine skin *J. Invest. Dermatol.* **122** 739–46

The above references might be cited in the text as

- Binzoni *et al* (2002) showed that ...
- ... may depend on the initial conditions (Binzoni *et al* 2003, Kendall and Quinlan 2004)
- postulated by Kendall *et al* (2004a, b)

8.5.2. Vancouver system. In this system the reference list gives the references in the numerical order in which they are cited in the text. To cite a reference using this system the reference list number is given within square brackets, like this [2], or for two or more entries, [2,5,7–9].

Examples:

- [1] Strite S and Morkoc H 1992 *J. Vac. Sci. Technol. B* **10** 1237
- [2] Jain S C, Willander M, Narayan J and van Overstraeten R 2000 *J. Appl. Phys.* **87** 965
Kendall M A F and Quinlan N J 2004 Intradermal ballistic delivery of micro-particles into excised human skin for drug and vaccine applications *J. Biomech.* **37** 1733–41
- [3] Nakamura S, Senoh M, Nagahama S, Iwase N, Yamada T, Matsushita T, Kiyoku H and Sugimoto Y 1996 *Japan. J. Appl. Phys.* **35** L74

Points to note

- Apart from the numbering of references, the structure of individual entries in a Vancouver list is identical to that in a Harvard list.
- Reference [2], above, contains two discrete references. This is permissible, **but** each discrete reference should start on a new line (never just separate references by a period or semicolon) and should contain full article information (author(s), year, title of journal, volume, pages).

8.6. Formatting references

The detailed structure of references, i.e., the formatting rules discussed below, *are the same for both the Vancouver and Harvard systems.*

8.6.1. References to printed journal articles. A normal reference to a journal article contains three different fonts as listed in table 4.

Table 4. Font styles for a reference to a journal article.

Element	Style
Authors	Roman type
Year	Roman type
Article title (optional)	Roman type
Journal title	Italic type
Volume number	Bold type
Page numbers	Roman type

Points to note

- The authors should be in the form: family name (with only the first letter capitalized) followed by the initials with no periods after the initials. Authors should be separated by a comma except for the last two which should be separated by ‘and’ with no comma preceding it.
- The article title (if given) should be in lower case letters, except for an initial capital, and should follow the year.
- The journal title should be abbreviated and in italic. If a journal has several parts denoted by different letters the part letter should be inserted after the journal in Roman type, e.g. *Phys. Rev. A*.
- Both the initial and final page numbers should be given where possible. The final page number should be in the shortest possible form and separated from the initial page number by dash, e.g. 1203–14, i.e. the numbers ‘12’ are not repeated.

8.6.2. References to preprints. For preprints there are two distinct cases. Where the article has been published in a journal and the preprint is supplementary information it should be given as in [1], below, when the only reference available is the preprint it should be given as in [2]:

- [1] Kunze K 2003 T-duality and Penrose limits of spatially homogeneous and inhomogeneous cosmologies *Phys. Rev. D* **68** 063517 (*Preprint* gr-qc/0303038)

- [2] Milson R, Coley A, Pravda V and Pravdova A 2004 Alignment and algebraically special tensors
Preprint gr-qc/0401010

8.6.3. *References to electronic-only journals.* Article numbers are usually given with no page ranges as most electronic-only journals start each article on page 1. For New Journal of Physics (article number may have from one to three digits) see [1], for SISSA journals the volume is divided into monthly issues and these form part of the article number, as in [2] and [3]

- [1] Fischer R 2004 Bayesian group analysis of plasma-enhanced chemical vapour deposition data *New. J. Phys.* **6** 25
 [2] Horowitz G T and Maldacena J 2004 The black hole final state *J. High Energy Phys.* JHEP02(2004)008
 [3] Bentivegna E, Bonanno A and Reuter M 2004 Confronting the IR fixed point cosmology with high-redshift observations *J. Cosmol. Astropart. Phys.* JCAP01(2004)001.

8.6.4. *References to books, conference proceedings and reports.* These are similar to journal references, but have only two different fonts (see table 5).

Table 5. Font styles for references to books, conference proceedings and reports.

Element	Style
Authors	Roman type
Year	Roman type
Book title	Italic type
Editors	Roman type
Place (city, town etc) of publication	Roman type
Publisher	Roman type
Volume	Roman type
Page number(s)	Roman type

Points to note

- Book titles should have initial capital letters for all except minor words. Words such as Proceedings, Symposium, International, Conference, Second, etc should be abbreviated to *Proc.*, *Symp.*, *Int.*, *Conf.*, *2nd*, respectively, but the rest of the title should be given in full, followed by the date (normally the year is sufficient) of the conference and the town or city where the conference was held. For Laboratory Reports the Laboratory should be given wherever possible, e.g. *Argonne National Laboratory Report*.
- Some books are volumes within series (see examples [4] below). In these cases the series information should come immediately after the title, in parentheses, with the series title in italic, but the volume in Roman.
- The volume number, for example vol 2, should be followed by the editors, if any, in a form such as 'ed A J Smith and P R Jones'. Use *et al* if there are more than two editors. Next comes the town of publication and publisher, within brackets and separated by a colon, and finally the page numbers preceded by p if only one number is given or pp if several numbers are given.

Examples:

- [1] Kurata M 1982 *Numerical Analysis for Semiconductor Devices* (Lexington, MA: Heath)
- [2] Caplar R and Kulisic P 1973 *Proc. Int. Conf. on Nuclear Physics (Munich)* vol 1 (Amsterdam: North-Holland/American Elsevier) p 517
- [3] Szytula A and Leciejewicz J 1989 *Handbook on the Physics and Chemistry of Rare Earths* vol 12, ed K A Gschneidner Jr and L Erwin (Amsterdam: Elsevier) p 133
- [4] Kuhn T, Binder E, Rossi F, Lohner A, Rick K, Leisching P, Leitenstorfer A, Elsaesser T and Stolz W 1994 Coherent excitonic and free-carrier dynamics in bulk GaAs and heterostructures *Coherent Optical Interactions in Semiconductors: Proc. NATO Advanced Research Workgroup (Cambridge, UK, 11–14 August 1993) (NATO Advanced Study Institute, Series B: Physics vol 330)* ed R T Phillips (New York: Plenum) pp 33–62

9. Cross referencing

You should not use Word's built-in cross-referencing facilities. Instead, you should type the number of the figure, table, reference, section etc that you wish to cross-reference.

Appendix A. Embedding graphics in a Microsoft Word document**A.1. How to embed graphics into a Word document**

- Create a graphic in one of the formats Word is able to import (for example, TIFF, JPG, EPS etc).
- From the *Insert* menu, select *Picture* → *From File...* (see figure A1).
- When the 'Insert Picture' dialog box is displayed, click on the *Insert* button on the bottom right corner of the dialog box (see figure A2).
- Select the *Insert* option (see figure A2). This will make sure that the graphic is saved with (embedded into) the Word document.

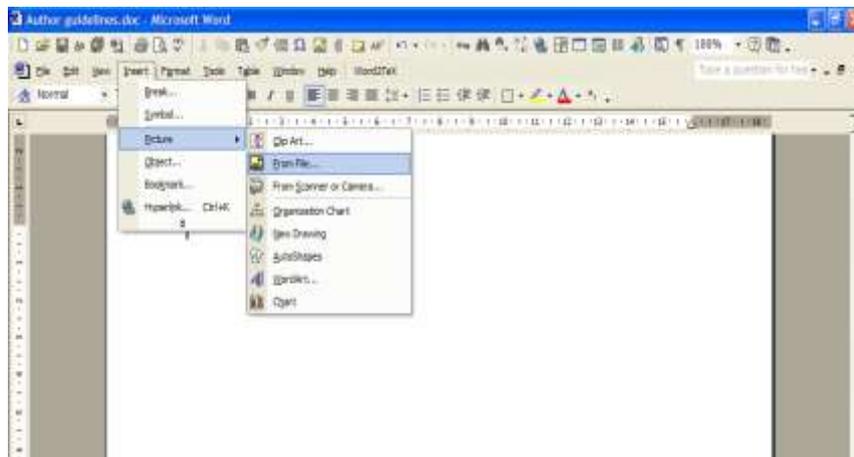


Figure A1. Inserting a graphic into a Word document.

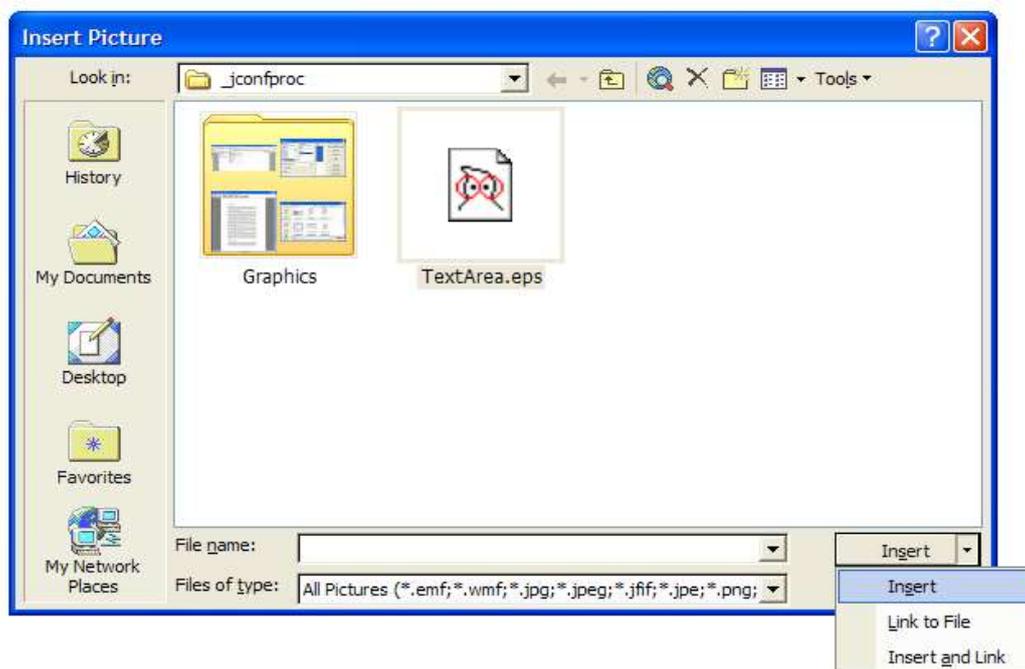


Figure A2. Embedding a graphic into a Word document.

A.2. Copy and pasting graphics into a Word document

- If the application you are using to prepare your illustrations does not export or save the graphics in a format that Word is able to import, or you have difficulty exporting the graphic, you should copy and paste the graphic into the Word document. **Note** that you may need to use the *Edit* → *Paste Special...* option to correctly paste the graphic into your Word document.

Appendix B. Math fonts

B.1. Math fonts and Microsoft Word

Greek mathematical symbols should be formatted using the ‘Symbol’ font. Text and non-Greek characters/variables should be formatted using ‘Times’ (sometimes called ‘Times Roman’ or ‘Times New Roman’ depending your computer setup). Sections B.1.1. and B.1.2. show how to set up the font sizes and styles in Word’s ‘Equation Editor’.

Avoid ‘Insert Symbol’

Please *avoid* using Word’s ‘Insert Symbol’ command. Symbols inserted in this way may not appear in the PostScript and PDF file of your article—they often ‘drop out’. Instead, for example, to type Greek characters, type the corresponding Latin character (e.g., ‘a’ for α) and manually change the font to Symbol using *Format* → *Font* and then select ‘Symbol’ font.

B.1.1 To set font sizes in Equation Editor

- Create a new document and insert an equation (*Insert* → *Object*).
- Double-click the equation to bring up the equation toolbar (see figure B1).



Figure B1. The equation toolbar.

- Select *Size* → *Define* to display the ‘Sizes’ dialog box (see figure B2). Type in the following values:

Full:	11 pt
Subscript/Superscript:	8 pt
Sub-Subscript/Superscript:	6 pt

The remaining options can be set as follows:

Symbol:	15 pt (or other value if you prefer)
Sub-symbol:	10 pt (or other value if you prefer)

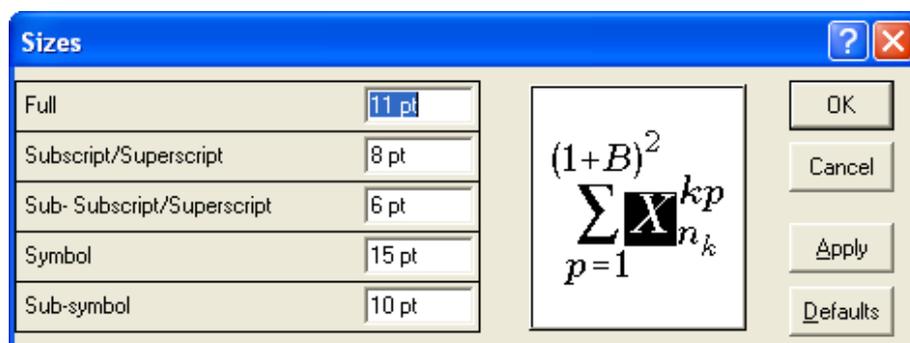


Figure B2. Setting font sizes in Equation Editor.

B.1.2. To set font styles in Equation Editor

- Create a new document and insert an equation.
- Double-click the equation to bring up the equation toolbar (see figure B1).
- Select *Style* → *Define* to display the ‘Styles’ dialog box (see figure B3).
- Set the equation styles as shown in figure B3. Note that you may see ‘Times’ or ‘Times Roman’ on your computer rather than the ‘Times New Roman’ shown in figure B3. This will depend on your computer’s configuration. **Make sure you use the same ‘version’ of ‘Times’ that you used for the text of your article.**

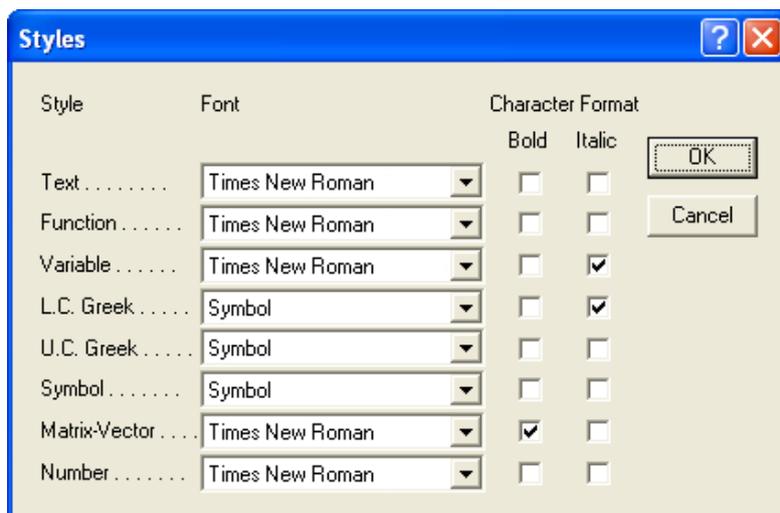


Figure B3. Choosing font styles in Equation Editor.