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#### **GUIDE**

# Computer Science Education LATEX style guide for authors (Style 1 + American Psychological Association reference style)

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(v2.0 released December 2013)

This guide is for authors who are preparing papers for the Taylor & Francis journal Computer Science Education (nCSE) using the LaTeX document preparation system and the class file nCSE2e.cls, which is available via the journal's homepage on the Taylor & Francis website. Authors planning to submit papers in LATEX are advised to use nCSE2e.cls as early as possible in the creation of their files.

**Keywords:** submission instructions; source file coding; environments; references citation; fonts; numbering (Please provide three to six keywords taken from terms used in your manuscript)

## Index to information contained in this guide

- 1. Introduction
  - 1.1. The nCSE document class
- 1.2. Submission of LATEX articles to the journal
- 2. Using the nCSE class file
- 3. Additional features
  - 3.1. Footnotes to article titles and authors' names
  - 3.2. Abstracts
  - 3.3. Lists
  - 3.4. Landscape pages
- 4. Some guidelines for using standard features
  - 4.1. Sections
  - 4.2. Illustrations (figures)
  - 4.3. Tables
  - 4.4. Theorem-like environments
  - 4.5. Typesetting mathematics
    - 4.5.1. Displayed mathematics
    - 4.5.2. Bold math italic symbols
    - 4.5.3. Bold Greek
    - 4.5.4. Upright Greek characters and the upright partial derivative sign

- 4.6. Acknowledgements
- 4.7. Funding
- 4.8. Notes
- 4.9. Supplemental material
- 4.10. References
  - 4.10.1. References cited in the text
  - 4.10.2. The list of references
- 4.11. Appendices
- 4.12. nCSE macros
- 5. Example of a section heading including SMALL CAPS, italic, and bold Greek such as  $\kappa$
- 6. nCSE journal style
  - 6.1. Hyphens, n-rules, m-rules and minus signs
  - 6.2. References
- 6.3. Maths fonts
- 7. Troubleshooting
- 8. Fixes for coding problems
- 9. Obtaining the nCSE2e class file
  - 9.1 Via the Taylor & Francis website
  - $9.2~{
    m Via~e}{
    m -mail}$

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#### 1. Introduction

In order to assist authors in the process of preparing a manuscript for *Computer Science Education (nCSE)*, the journal's layout style has been implemented as a  $AT_{FX} 2\varepsilon$  class file based on the article document class.

Commands that differ from or are provided in addition to the standard LATEX  $2\varepsilon$  interface are explained in this guide. The guide alone is not intended as a substitute for an appropriate LATEX  $2\varepsilon$  manual.

The nCSEguide.tex file can also be used as a template for composing an article for submission by cutting, pasting, inserting and deleting text as appropriate, using the LATEX environments provided (e.g. \begin{equation}, \begin{enumerate}).

Please note that the index following the abstract in this guide is provided for information only. An index is not required in submitted papers.

#### 1.1. The nCSE document class

The nCSE class file preserves the standard LaTeX  $2_{\varepsilon}$  interface such that any document that can be produced using article.cls can also be produced using the nCSE document class. However, the measure (the width of the text on a page) differs from the default for article.cls, therefore line breaks will change and some long equations may need to be reformatted accordingly.

If your article is accepted for publication in the journal, it will be typeset in Monotype Times. As most authors do not own this font, it is likely that the page make-up will alter with the change of font. Please therefore ignore details such as slightly long lines of text, page stretching, or figures falling out of synchronization with their citations in the text: these details will be dealt with by the typesetter. Similarly, it is unnecessary to spend time addressing warnings in the log file – if your .tex file compiles to produce a PDF file that correctly reflects how you wish your paper to appear, such warnings will not prevent your source files being imported into the typesetter's program.

# 1.2. Submission of LATEX articles to the journal

Manuscripts for possible publication in the journal should be submitted to the Editors for review as directed in the journal's Instructions for Authors, which may be found at http://www.tandf.co.uk/journals/authors/ncseauth.asp.

Manuscripts created using LATEX should be converted to PDF format prior to submission. The LATEX source files and any graphics files will be required in addition to the final PDF version when final, revised versions of accepted manuscripts are submitted.

'Open-source' IATEX  $2_{\varepsilon}$  should be used in preference to proprietary systems such as TCILaTeX or Scientific WorkPlace; similarly, class files such as REVTeX4 that produce a document in the style of a different publisher and journal should not be used for preference.

Authors who wish to incorporate Encapsulated PostScript artwork directly in their articles can do so by using Tomas Rokicki's EPSF macros (which are supplied with the DVIPS PostScript driver). See Section 3.4, which also demonstrates how to treat landscape pages. Please remember to supply any additional figure macros you use with your article in the preamble before \begin{document}. Authors should

not attempt to use implementation-specific \specials directly.

Ensure that any author-defined macros are gathered together in the source file, just before the **\begin{document}** command.

Please note that if serious problems are encountered with the coding of a paper (missing author-defined macros, for example), it may prove necessary to divert the paper to conventional typesetting, i.e. it will be re-keyed.

## 2. Using the nCSE class file

If the file nCSE2e.cls is not already in the appropriate system directory for  $\LaTeX$   $2_{\mathcal{E}}$  files, either arrange for it to be put there, or copy it to your working folder. In order to use the nCSE document class, replace the command  $\texttt{documentclass\{article\}}$  at the beginning of your document with the command  $\texttt{documentclass\{nCSE2e\}}$ .

The following document-class options should not be used with the nCSE class file:

- 10pt, 11pt, 12pt unavailable;
- oneside, twoside not necessary, oneside is the default;
- leqno, titlepage should not be used;
- onecolumn not necessary as it is the default style.

The geometry package and commands associated with it should also not be used to adjust the page dimensions.

#### 3. Additional features

## 3.1. Footnotes to article titles and authors' names

On the title page, the **\thanks** control sequence may be used to produce a footnote to either the title or authors' names. Footnote symbols for this purpose should be used in the order:  $\dagger$  (coded as \dagger),  $\ddagger$  (\\dagger\\dagger),  $\S$  (\\S),  $\P$  (\\P),  $\|$  (\\I),  $\dagger$ † (\\dagger\\dagger),  $\S$  (\\S\\S),  $\P$ ¶ (\\P\\P),  $\|$  (\\I).

Any \footnotes to the main text will automatically be assigned the superscript symbols 1, 2, 3, etc. by the class file.<sup>1</sup>

The title, author(s) and affiliation(s) should be followed by the \maketitle command. If preparing an anonymized version for peer review, \maketitle may follow directly after the title in order to shield the authors' identities from the reviewers.

#### 3.2. Abstracts

At the beginning of your article, the title should be generated in the usual way using the \maketitle command. Immediately following the title you should include an abstract. The abstract should be enclosed within an abstract environment. For example, the titles for this guide were produced by the following source code:

<sup>&</sup>lt;sup>1</sup>If preferred, the endnotes package may be used to set the notes at the end of your text, before the bibliography. The symbols will be changed to match the style of the journal if necessary by the typesetter.

\title{{\itshape Computer Science Education} \LaTeX\ style guide
for authors \break (Style 1 + American Psychological Association
reference style)}

\author{A.N. Author\$^{\rm a}\$\$^{\ast}\$\thanks{\$^\ast\$Corresponding author. Email: latex.helpdesk@tandf.co.uk \vspace{6pt}} and I.T. Consultant\$^{\rm b}\$\\vspace{6pt} \$^{a}\${\em{Taylor \& Francis, 4 Park Square, Milton Park, Abingdon, UK}}; \$^{b}\${\em{Institut f\"{u}r Informatik, Albert-Ludwigs-Universit\"{a}t, Freiburg, Germany}}\\received{v2.0 released December 2013} }

\maketitle

## \begin{abstract}

This guide is for authors who are preparing papers for the Taylor \& Francis journal {\em Computer Science Education} ({\it nCSE}) using the \LaTeX\ document preparation system and the class file {\tt nCSE2e.cls}, which is available via the journal's homepage on the Taylor \& Francis website. Authors planning to submit papers in \LaTeX\ are advised to use {\tt nCSE2e.cls} as early as possible in the creation of their files. \end{abstract}

#### 3.3. Lists

The nCSE class file provides numbered and unnumbered lists using the enumerate environment and bulleted lists using the itemize environment.

The enumerated list will number each list item with a rabic numerals by default. For example,

- (1) first item
- (2) second item
- (3) third item

was produced by:

#### \begin{enumerate}

\item first item

\item second item

\item third item

\end{enumerate}

Alternative numbering styles can be achieved by inserting an optional argument in square brackets to each item, e.g. \item[(i)] first item to create a list numbered with roman numerals.

Unnumbered lists are also provided using the enumerate environment. For example,

First unnumbered indented item without label.

Second unnumbered item.

Third unnumbered item.

was produced by:

```
\begin{enumerate}
  \item[] First unnumbered indented item without label.
  \item[] Second unnumbered item.
  \item[] Third unnumbered item.
\end{enumerate}
```

Bulleted lists are provided using the itemize environment. For example,

- First bulleted item
- Second bulleted item
- Third bulleted item

was produced by:

```
\begin{itemize}
  \item First bulleted item
  \item Second bulleted item
  \item Third bulleted item
\end{itemize}
```

## 3.4. Landscape pages

If a table or illustration is too wide to fit the standard measure, it must be turned, with its caption, through  $90^{\circ}$  anticlockwise. Landscape illustrations and/or tables can be produced using the **rotating** package, which is called by the nCSE class file. The following commands can be used to produce such pages.

Before any float environment, use the \setcounter command as above to fix the numbering of the caption. Subsequent captions will then be automatically renumbered accordingly.

## 4. Some guidelines for using standard features

The following notes are intended to help you achieve the best effects with the nCSE2e class file.

#### 4.1. Sections

 $\LaTeX$   $2\varepsilon$  provides five levels of section headings and they are all defined in the nCSE2e class file:

- (A) \section
- (B) \subsection
- (C) \subsubsection
- (D) \paragraph
- (E) \subparagraph

Numbering is automatically generated for section, subsection, subsubsection and paragraph headings. If you need additional text styles in the headings, see the examples in Section 5.

# 4.2. Illustrations (figures)

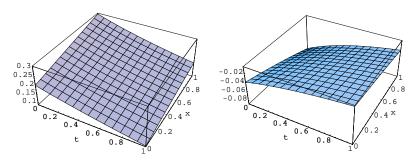
The nCSE class file will cope with most positioning of your illustrations and you should not normally use the optional positional qualifiers of the figure environment, which would override these decisions. See 'Instructions for Authors' in the journal's homepage on the Taylor & Francis website for how to submit artwork (note that requests to supply figures and tables separately from text are for the benefit of authors using Microsoft Word; authors using IATEX may include these at the appropriate locations in their PDF file). The original source files of any illustrations will be required when the final, revised version is submitted. Authors should ensure that their figures are suitable (in terms of lettering size, etc.) for the reductions they intend.

Figure captions should be below the figure itself, therefore the \caption command should appear after the figure. For example, Figure 1 with caption and sub-captions is produced using the following commands:

```
\begin{figure}
\begin{center}
\subfigure[An example of an individual figure sub-caption.]{
\resizebox*{5cm}{!}{\includegraphics{senu_gr1.eps}}}\hspace{5pt}
\subfigure[A slightly shorter sub-caption.]{
\resizebox*{5cm}{!}{\includegraphics{senu_gr2.eps}}}
\caption{\label{fig1} Example of a two-part figure with individual
sub-captions showing that captions are flush left and justified if
greater than one line of text, otherwise centred under the figure.}
\label{sample-figure}
\end{center}
\end{figure}
```

The control sequences \subfigure{} and \includegraphics{} require subfigure.sty and graphicx.sty. The former is called in the preamble of the nCSEguide.tex file (in order to allow your choice of alternative if preferred) and the latter by the nCSE2e class file; both are included with the IATEX style guide package for this journal for convenience.

To ensure that figures are correctly numbered automatically, the \label{} command should be inserted just after \caption{}.



- (a) An example of an individual figure sub-caption.
- (b) A slightly shorter sub-caption.

Figure 1. Example of a two-part figure with individual sub-captions showing that captions are flush left and justified if greater than one line of text, otherwise centred under the figure.

Table 1. Radio-band beaming model parameters for FSRQs and BL Lacs.

Class <sup>a</sup>	$\gamma_1$	${\gamma_2}^{ m b}$	$\langle \gamma \rangle$	G	f	$\theta_c$
BL Lacs FSRQs	5 5	36 40	7 11	$-4.0 \\ -2.3$	$\begin{array}{c} 1.0 \times 10^{-2} \\ 0.5 \times 10^{-2} \end{array}$	10° 14°

<sup>&</sup>lt;sup>a</sup>This footnote shows what footnote symbols to use.

## 4.3. Tables

The nCSE class file will cope with most positioning of your tables and you should not normally use the optional positional qualifiers of the table environment, which would override these decisions. The table caption appears above the body of the table in nCSE style, therefore the \tbl command should appear before the body of the table.

The tabular environment can be used as illustrated here to produce tables with single thick and thin horizontal rules, which are allowed, if desired. Thick rules should be used at the head and foot only and thin rules elsewhere.

Commands to redefine quantities such as \arraystretch should be omitted. For example, Table 1 is produced using the following commands. Note that \rm will produce a roman character in math mode. There are also \bf and \it, which produce bold face and text italic in math mode.

<sup>&</sup>lt;sup>b</sup>This footnote shows the text turning over when a long footnote is added.

\tabnote{\$^{\rm a}\$This footnote shows what footnote symbols to use.}
\tabnote{\$^{\rm b}\$This footnote shows the text turning over when a
long footnote is added.}
\label{symbols}
\end{table}

To ensure that tables are correctly numbered automatically, the \label{} command should be inserted just before \end{table}.

Tables produced using the booktabs package of macros for typesetting tables are also compatible with the nCSE class file.

#### 4.4. Theorem-like environments

A predefined **proof** environment is provided by the **amsthm** package (which is called by the class file), as follows:

*Proof.* More recent algorithms for solving the semidefinite programming relaxation are particularly efficient, because they explore the structure of the MAX-CUT problem.  $\Box$ 

This was produced by simply typing:

\begin{proof}

More recent algorithms for solving the semidefinite programming relaxation are particularly efficient, because they explore the structure of the MAX-CUT problem.

\end{proof}

Other theorem-like environments (theorem, lemma, corollary, etc.) need to be defined as required, e.g. using \newtheorem{theorem}{Theorem} in the preamble of your .tex file before \begin{document}. The format of the text in these environments may be changed if necessary to match the style of the journal by the typesetter during preparation of your proofs.

#### 4.5. Typesetting mathematics

## 4.5.1. Displayed mathematics

The nCSE class file will set displayed mathematics centred on the measure without equation numbers, provided that you use the LATEX  $2\varepsilon$  standard control sequences open (\[ \] ) and close (\] ) square brackets as delimiters. The equation

$$\sum_{i=1}^{p} \lambda_i = \operatorname{trace}(\mathbf{S}) \qquad i \in \mathbb{R}$$

was typeset using the commands

\[
\sum\_{i=1}^p \lambda\_i = {\rm trace}({\textrm{\bf S}})\qquad
i\in {\mathbb R}
\].

For those of your equations that you wish to be automatically numbered sequentially throughout the text, use the equation environment, e.g.

$$\sum_{i=1}^{p} \lambda_i = \operatorname{trace}(\mathbf{S}) \qquad i \in \mathbb{R}$$
 (1)

was typeset using the commands

```
\begin{equation}
  \sum_{i=1}^p \lambda_i = {\rm trace}({\textrm{\bf S}})quad
  i\in {\mathbb R}
\end{equation}
```

Part numbers for sets of equations may be generated using the **subequations** environment, e.g.

$$\varepsilon \rho w_{tt}(s,t) = N[w_s(s,t), w_{st}(s,t)]_s, \tag{2a}$$

$$w_{tt}(1,t) + N[w_s(1,t), w_{st}(1,t)] = 0,$$
 (2b)

which was generated using the control sequences

This is made possible by the subeqn package, which is called by the class file. If you put the \label{} just after the \begin{subequations} line, references will be to the collection of equations, '(2)' in the example above. Or, like the example code above, you can reference each equation individually – e.g. '(2a)'.

## 4.5.2. Bold math italic symbols

To get bold math italic you can use \bm, which works for all sizes, e.g.

```
\sffamily
\begin{equation}
    {\rm d}({\bm s_{t_{\bm u}}) = \langle{\bm\alpha({\sf{\textbf L}})}
    [RM({\bm X}_y + {\bm s}_t) - RM({\bm x}_y)]^2 \rangle
\end{equation}
\normalfont
```

produces

$$d(s_{t_n}) = \langle \alpha(\mathbf{L})[RM(\mathbf{X}_y + \mathbf{s}_t) - RM(\mathbf{x}_y)]^2 \rangle$$
 (3)

Note that subscript, superscript, subscript to subscript, etc. sizes will take care of themselves and are italic, not bold, unless coded individually. \bm produces the same effect as \boldmath. \sffamily...\normalfont allows upright sans serif fonts to be created in math mode by using the control sequence '\sf'.

#### 4.5.3. Bold Greek

Bold lowercase as well as uppercase Greek characters can be obtained by  $\{\bm \gamma\}$ , which gives  $\gamma$ , and  $\{\bm \Gamma\}$ , which gives  $\Gamma$ .

4.5.4. Upright lowercase Greek characters and the upright partial derivative sign

Upright lowercase Greek characters can be obtained with the nCSE class file by inserting the letter 'u' in the control code for the character, e.g. \umanumum and \upi produce  $\mu$  (used, for example, in the symbol for the unit microns –  $\mu$ m) and  $\pi$  (the ratio of the circumference to the diameter of a circle). Similarly, the control code for the upright partial derivative  $\vartheta$  is \upartial.

## 4.6. Acknowledgements

This unnumbered section, e.g. \section\*{Acknowledgement(s)}, should be used for thanks, etc. and placed before any Notes or References sections.

## 4.7. Funding

This unnumbered section, e.g. \section\*{Funding}, should be used for grant details, etc. and placed before any Notes or References sections.

## 4.8. Notes

This unnumbered section, e.g. \section\*{Note(s)}, may be placed before the References section.

## 4.9. Supplemental material

Supplemental material should be referenced within your article where appropriate. An unnumbered section, e.g. \section\*{Supplemental material}, detailing the supplemental material available should be placed immediately before the list of references, and should include a brief description of each supplemental file.

## 4.10. References

## 4.10.1. References cited in the text

References are cited in the text in American Psychological Association style, i.e. in alphabetical order separated by semi-colons, e.g. (Green, 2002; Harlow, 1983;

Wegener & Petty, 1994) or '... see Smith (1985, p. 75)'. If there are two authors with the same surname, use the first initials with the surnames, e.g. (E. Johnson, 2001; L. Johnson, 1998). If there are three to five authors, list all the authors in the first citation, e.g. (Kernis, Cornell, Sun, Berry, & Harlow, 1993). In subsequent citations, use only the first author's surname followed by et al., e.g. (Kernis et al., 1993). For six or more authors, cite the first author's name followed by et al. For two or more sources by the same author(s) in the same year, use lower-case letters (a, b, c,...) with the year to order the entries in the References list and use these lower-case letters with the year in the in-text citations, e.g. (Green, 1981a,b). Further details on this reference style can be found in the journal's Instructions for Authors.

Each bibliographical entry has a key, which is assigned by the author and used to refer to that entry in the text. In this document, the key ev94 in the citation form \citep{ev94} produces '(Evans, 1994)', and the keys Eri1984, Bar91 and Mi193 in the citation form \citep{Eri1984,Bar91,Mi193} produce '(Barlow, 1991; Ericsson & Simon, 1984; Miller, 1993)'. The citation \citep{GloRib51} produces '(Glover, Bizet, Bach, Strauss, & Ribeiro, 1951)' where the citation first appears in the text, and '(Glover et al., 1951)' in any subsequent citations. The appropriate citation style for different situations can be obtained, for example, by \citet{hk97} for 'Kern (1997)', \citet{Maz91,PeaEtAl76,aiex00} for 'Aiex et al. (2000); Mazzeo (1991); Pierce et al. (1976)', and \citealt{Kor95} for 'Korb 1995'. Optional notes may be included at the beginning and end of a citation by the use of square brackets, e.g. \citep[see][chap. 3]{Agu95} produces '(see Agutter, 1995, chap. 3)'. Citation of the year alone may be produced by \citeyear{cwm73}, i.e. '1973', or \citeyearpar{cwm73}, i.e. '(1973)'.

# 4.10.2. The list of references

References should be listed at the end of the main text in alphabetical order, then chronologically (earliest first), with full page ranges (where appropriate) and issue numbers (for journals paginated by issue). If a reference has more than seven named authors, list the first six, followed by an ellipsis (...), then the last author.

The following list shows some references prepared in the style of the journal:

# References

Agutter, A. J. (1995). The linguistic significance of current British slang. Unpublished doctoral dissertation, Edinburgh University, UK.

Aiex, R. M., Pierce, I. F., Donizetti, G., von Weber, C. M., Bizet, G., Bach, C. P. E., ... Dukas, P. (2000). *Computing tools for modelling orchestral performance* (Tech. Rep. No. DAMTP 2000/NA10). Cambridge, UK: University of Cambridge.

Barlow, D. H. (Ed.). (1991). Diagnoses, dimensions, and DSM-IV [special issue]. *Journal of Abnormal Psychology*, 100(3).

Ericsson, K. A., & Simon, H. A. (1984). Protocol analysis: Verbal reports as data. Cambridge, MA: MIT Press.

Evans, W. A. (1994). Approaches to intelligent information retrieval. *Information Processing and Management*, 7(2), 147–168.

Glover, F., Bizet, G., Bach, C. P. E., Strauss, R., & Ribeiro, C. C. (Eds.). (1951). Lessons of the British war economy (2nd ed., Vol. 5, pp. 1–24). Westport, CT: Greenwood Press. Kern, H. (1997). The resurgent Japanese economy and a Japan–United States free trade

agreement. In C. Lambert & G. Holst (Eds.), 4th international conference on the restructuring of the economic and political system in Japan and Europe, Milan, Italy, 21–25 May 1996 (pp. 147–156). Singapore: World Scientific.

Korb, K. B. (1995). Persons and things: Book review of Bringsjord on robot-consciousness. *Psychologuy*, 6(15). Retrieved May 20, 2004, from http://psycprints.ecs.soton.ac.uk/archive/00000462/

Mazzeo, J. (1991) Comparability of computer and paper-and-pencil scores (College Board Rep. No. 91). Princeton, NJ: Educational Testing Service.

Miller, M. E. (1993). The Interactive Tester (Version 4.0) [Computer software]. Westminster, CA: Psytek Services.

Misner, C. W. (1973). Efficient algorithms for layer assignment problems. In I. Gottlob (Ed.), *Gravitation in a collapsing Universe* (2nd ed., Vol. 5, pp. 63–83). San Francisco, CA: Freeman.

Pierce, I. F., Donizetti, G., von Weber, C. M., Glover, F., Ogilvy, A. T., Clements, A. R. S., & Ribeiro, C. C. (1976). A model of output, employment, wages and prices in the UK. In M. Laguna & J. L. Gonzáles-Velarde (Eds.), Computing tools for modeling, optimization and simulation: Interfaces in computer science and operations research (2nd ed., pp. 1–24). Boston, MA: Cambridge University Press.

This was produced by typing:

\begin{thebibliography}{12}

\bibitem[Agutter(1995)]{Agu95}

Agutter, A. J. (1995). {\em{The linguistic significance of current British slang}}. Unpublished doctoral dissertation, Edinburgh University, UK.

\bibitem[Aiex et al.(2000)]{aiex00}

Aiex, R. M., Pierce, I. F., Donizetti, G., {{v}on~Weber}, C. M., Bizet, G., Bach, C. P. E., \ldots Dukas, P. (2000). {\em{Computing tools for modelling orchestral performance}} (Tech. Rep. No. DAMTP 2000/NA10). Cambridge, UK: University of Cambridge.

\bibitem[Barlow(1991)]{Bar91}

Barlow, D. H. (Ed.). (1991). Diagnoses, dimensions, and DSM-IV [special issue]. {\em{Journal of Abnormal Psychology}}, {\em{100}\,}(3).

\bibitem[Ericsson \& Simon(1984)]{Eri1984}

Ericsson, K. A., & Simon, H. A. (1984). {\em{Protocol analysis: Verbal reports as data}}. Cambridge, MA: MIT Press.

\bibitem[Evans(1994)]{ev94}

Evans, W. A. (1994). Approaches to intelligent information retrieval. {\em{Information Processing and Management}}, {\em{7\,}}(2), 147--168.

\bibitem[Glover et al.(1951)Glover, Bizet, Bach, Strauss, \& Ribeiro]{GloRib51}

Glover, F., Bizet, G., Bach, C. P. E., Strauss, R., & Ribeiro, C. C. (Eds.). (1951). {\em{Lessons of the British war economy}} (2nd ed.,

Vol. 5, pp. 1--24). Westport, CT: Greenwood Press.

## \bibitem[Kern(1997)]{hk97}

Kern, H. (1997). The resurgent Japanese economy and a Japan--United States free trade agreement. In C. Lambert & G. Holst (Eds.), {\em{4th international conference on the restructuring of the economic and political system in Japan and Europe}}, Milan, Italy, 21--25 May 1996 (pp. 147--156). Singapore: World Scientific.

## \bibitem[Korb(1995)]{Kor95}

Korb, K. B. (1995). Persons and things: Book review of Bringsjord
on robot-consciousness. {\em Psycholoquy}, {\em{6\,}}(15).
Retrieved May 20, 2004, from
http://psycprints.ecs.soton.ac.uk/archive/00000462/

## \bibitem[Mazzeo(1991)]{Maz91}

Mazzeo, J. (1991) {\em{Comparability of computer and paper-and-pencil scores}} (College Board Rep. No. 91). Princeton, NJ: Educational Testing Service.

## \bibitem[Miller(1993)]{Mil93}

Miller, M. E. (1993). The Interactive Tester (Version 4.0) [Computer software]. Westminster, CA: Psytek Services.

## \bibitem[Misner(1973)]{cwm73}

Misner, C. W. (1973). Efficient algorithms for layer assignment problems. In I. Gottlob (Ed.), {\em Gravitation in a collapsing Universe} (2nd ed., Vol. 5, pp. 63--83). San Francisco, CA: Freeman.

# \bibitem[Pierce et al.(1976)]{PeaEtAl76}

Pierce, I. F., Donizetti, G., von Weber, C. M., Glover, F., Ogilvy, A. T., Clements, A. R. S., & Ribeiro, C. C. (1976). A model of output, employment, wages and prices in the UK. In M. Laguna & J. L. Gonz\'{a}les-Velarde (Eds.), {\em{Computing tools for modeling, optimization and simulation: Interfaces in computer science and operations research}} (2nd ed., pp. 1--24). Boston, MA: Cambridge University Press.

# \end{thebibliography}

Each entry takes the form:

\bibitem[short list of authors' surnames(date of publication)long list of authors' surnames]{key} Bibliography entry

where 'long list of authors' surnames' is the *optional* 'long' list of three, four or five surnames which enables them all to appear where the bibitem is first cited in the text (if the long list is missing, the short list will be used instead), and 'key' is the tag that is to be used as an argument for

the \cite{} commands in the text of the article. The Bibliography entry should be the material that is to appear in the list of references, suitably formatted. The commands \usepackage[longnamesfirst,sort]{natbib} and \bibpunct[, ]{()}{;}{a}{,}{,} need to appear in the preamble of your .tex file in order to generate the in-text citations.

Instead of typing the bibliography by hand, you may prefer to create the list of references using a BibTeX database. For this we suggest using Erik Meijer's apacite package, which is available via CTAN. The apacite.sty, apacite.bst and english.apc files need to be placed in your working folder or in an appropriate directory, and the lines

```
\bibliographystyle{apacite}
\renewcommand\bibliographytypesize{\fontsize{10}{12}\selectfont}
\bibliography{nCSEguide}
```

included where the list of references should appear, where nCSEguide.bib is the database of bibliographic details for the references section included with the nCSE LATEX style guide package (to be replaced with the name of your own .bib file). The \usepackage[]{\natbib}, \bibpunct and \renewcommand\bibfont commands are not then required in your preamble and must be replaced with \usepackage[]{\apacite}. The [natbibapa] option is added in order to enable citation commands of the type \citep and \citet.

The LATEX source file of your paper will extract from your .bib file only those references that are cited in that paper and list them in the References section of it. Please include a copy of your .bib file and/or the final generated .bbl file among your source files if your .tex file does not contain a reference list in a thebibliography environment.

## 4.11. Appendices

Any appendices should be set after the list of references, beginning with the command \appendices followed by the command \section for each appendix title, e.g.

```
\appendices
\section{This is the title of the first appendix}
\section{This is the title of the second appendix}
produces:
```

## Appendix A. This is the title of the first appendix

## Appendix B. This is the title of the second appendix

Subsections, equations, figures, tables, etc. within appendices will then be automatically numbered as appropriate.

## 4.12. nCSE macros

Table 2 gives a list of macros for use with nCSE. The list displays each macro's code and a description/demonstration of its function.

Table	2.	nCSE	macros.

$\label{thmks} $$ \tilde{title-page}$ footnote to article title or author} $$$	e.g. 'Corresponding author. E-mail: A.N. Author@uiowa.edu'
lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:	for abstract on titlepage
$\mathbf{bm}$ {math and symbols}	bold italic $math\ and\ symbols$
$\left\langle \operatorname{bi}\left\{ \operatorname{text}\right\} \right\rangle$	bold italic $\textit{text}$
\sf{text or upright symbols in math mode}	$\operatorname{sans}$ serif text or upright symbols in math mode

# 5. Example of a section heading including SMALL CAPS, *italic*, and bold Greek such as $\kappa$

The following code shows how to achieve this section head:

\section{Example of a section heading including {\fontencoding{T1}\scshape{small caps}}, {\bi italic}, and bold Greek such as \${\bm\kappa}\$}\label{headings}

## 6. nCSE journal style

The notes given here relate to common style errors found in manuscripts, but are *not* intended to be exhaustive.

## 6.1. Hyphens, n-rules, m-rules and minus signs

- (i) Hyphens (one dash in T<sub>E</sub>X/L<sup>A</sup>T<sub>E</sub>X). nCSE uses hyphens for compound adjectives (e.g. low-density gas, least-squares fit, two-component model) but not for complex units or ranges, which could become cumbersome (e.g. 15 km s<sup>-1</sup> feature, 100–200  $\mu$ m observations).
- (ii) n-rules (two dashes in T<sub>E</sub>X/L<sup>A</sup>T<sub>E</sub>X). These are used (a) to denote a range (e.g. 1.6–2.2 μm); (b) to denote the joining of two words of equal standing (e.g. Kolmogorov–Smirnov test, Herbig–Haro object); (c) with spaces, as an alternative to parentheses (e.g. 'the results assuming no temperature gradient are indicative of . . . ').
- (iii) The m-rule (three dashes in  $T_EX/I^2T_EX$ ) has no specified use in nCSE.
- (iv) The minus sign (one dash in TEX/IATEX) is produced automatically in math mode by use of a single dash, e.g.

$$y_i \in \{-1, 1\} \quad \forall i \in V, \tag{4}$$

where  $|-V| = A^2 + B^2$ .

is produced by

 $\begin{equation} $y_{i} \in {-1, 1 } \quad i \in V, \\ end{equation} \\ noindent where <math>|-V|=A^2+B^2.$ 

## 6.2. References

It is important to use the correct reference style, details of which can be found in Section 4.10 above.

### 6.3. Maths fonts

Scalar variables should be mediumface italic (e.g. s for speed); vectors should be bold italic (e.g. v for velocity); matrices should be bold roman (upright) (e.g. A), and tensors should be bold upright sans serif (e.g. L). Differential d, partial differential  $\partial$ , complex i, exponential e, superscript T for 'transpose', sin, cos, tan, log, etc., should all be roman. Openface, or 'blackboard', fonts can be used, for example, for the integers  $\mathbb Z$  and the reals  $\mathbb R$ . Sub/superscripts that are physical variables should be italic, while those that are labels should be roman (e.g.  $C_p$ ,  $T_{\rm eff}$ ). Displayed equations should have end-of-line punctuation appropriate to the running text sentence of which they form a part.

## 7. Troubleshooting

Authors may from time to time encounter problems with the preparation of their papers in LATEX. The appropriate action to take will depend on the nature of the problem – the following is intended to act as a guide.

- (i) If the problem is with LATEX itself, rather than with the actual macros, please refer to the appropriate handbooks for initial advice.<sup>2</sup> If the solution cannot be found, and you suspect that the problem lies with the macros, then please contact Taylor & Francis (latex.helpdesk@tandf.co.uk).
- (ii) Problems with page make-up (e.g. large spaces between paragraphs, or under headings or figures; uneven columns; figures/tables appearing out of order): please do not attempt to remedy these yourself using 'hard' page make-up commands the typesetter will correct such problems. (You may, if you wish, draw attention to particular problems when submitting the final version of your paper.)
- (iii) If a required font is not available at your site, allow TEX to substitute the font and specify which font you require in the covering letter accompanying your file(s).

#### 8. Fixes for coding problems

This guide has been designed to minimize the need for user-defined macros to create special symbols. Authors are urged, wherever possible, to use the following coding rather than to create their own. This will minimize the danger of author-defined macros being accidentally 'overridden' when the paper is typeset (see Section 4.5, 'Typesetting mathematics'). In cases where it is essential to create your own macros, these should be displayed in the preamble of the source file before \begin{document}.

 $<sup>^2</sup>$ TEX: Knuth, D., 1986, The TEX book (New York: Addison–Wesley); IATEX 2 $_{\varepsilon}$ : Lamport, L., 1994, IATEX: A Document Preparation System, 2nd edn (New York: Addison–Wesley).

(i) Fonts in section headings and paper titles. The following are examples of styles that sometimes prove difficult to code.

## Paper titles:

Generalized Flory theory at  $\delta > 50^{\circ}$ 

is produced by

# Ion-ion correlations in H II regions

is produced by

\title{Ion--ion correlations in H\,{\sc ii} regions}

(ii) n-rules, m-rules, hyphens and minus signs (see Section 6.1 for correct usage). To create the correct symbols in the sentence

The high-resolution observations were made along a line at an angle of  $-15^{\circ}$  (East from North) from the axis of the jet – which runs North–South

you would use the following code:

The high-resolution observations were made along a line at an angle of \$-15^\circ\$ (East from North) from the axis of the jet -- which runs North--South

- (iii) Fonts in superscripts and subscripts. Subscripts and superscripts will automatically come out in the correct font and size in a math environment (e.g. enclosed by '\$' delimiters in running text or within  $\[\ldots, \]$  or the 'equation' environment for displayed equations). You can create the output  $k_x$  by typing  ${\rm k_x}$ . If the subscripts or superscripts need to be other than italic, they should be coded individually see (vi) below.
- (iv) Calligraphic letters (uppercase only). Normal calligraphic can be produced with \cal as usual (in math mode).
- (v) Automatic scaling of brackets. The codes \left and \right should be used to scale brackets automatically to fit the equation being set. For example, to get

$$v = x \left(\frac{N+2}{N}\right)$$

use the code

\[
 v = x \left( \frac{N+2}{N} \right)
\]

(vi) Roman font in equations. It is often necessary to make some symbols roman

in an equation (e.g. units, non-variable subscripts). For example, to get

$$\sigma \simeq (r/13 \ h^{-1} \ {\rm Mpc})^{-0.9}, \qquad \omega = \frac{N - N_{\rm s}}{N_{\rm R}}$$

use the code:

```
\[
\sigma \simeq (r/13~h^{-1}
    ~{\rm Mpc})^{-0.9}, \qquad \omega
    =\frac{N-N_{{\rm s}}}{N_{{\rm R}}}
\]
```

The siunits package of macros for typesetting units is also compatible with the nCSE class file.

## 9. Obtaining the nCSE2e class file

## 9.1. Via the Taylor & Francis website

This Guide for Authors and the nCSE2e.cls class file may be obtained via the Instructions for Authors on the Taylor & Francis homepage for the journal.

Please note that the class file calls up the following open-source LATEX packages, which will, for convenience, unpack with the downloaded Guide for Authors and class file: amsbsy.sty; amsfonts.sty; amsmath.sty; amssymb.sty; epsfig.sty; graphicx.sty; rotating.sty. The Guide for Authors optionally calls for natbib.sty and subfigure.sty, which are also supplied for convenience.

## 9.2. Via e-mail

This Guide for Authors, the class file and the associated open-source IATEX packages are also available by e-mail. Requests should be addressed to latex.helpdesk@tandf.co.uk clearly stating for which journal you require the Guide for Authors and/or class file.