

ARTICLE TEMPLATE

Taylor & Francis L^AT_EX template for authors (Interact layout + reference style S)

A. N. Author^a and John Smith^b

^aTaylor & Francis, 4 Park Square, Milton Park, Abingdon, UK; ^bInstitut für Informatik, Albert-Ludwigs-Universität, Freiburg, Germany

ARTICLE HISTORY

Compiled September 7, 2018

ABSTRACT

This template is for authors who are preparing a manuscript for a Taylor & Francis journal using the L^AT_EX document preparation system and the `interact` class file, which is available via selected journals' home pages on the Taylor & Francis website.

KEYWORDS

Sections; lists; figures; tables; mathematics; fonts; references; appendices

1. Introduction

In order to assist authors in the process of preparing a manuscript for a journal, the Taylor & Francis 'Interact' layout style has been implemented as a L^AT_EX 2_ε class file based on the `article` document class. A Bib_TE_X bibliography style file and a sample bibliography are also provided in order to assist with the formatting of your references.

Commands that differ from or are provided in addition to standard L^AT_EX 2_ε are described in this document, which is *not* a substitute for a L^AT_EX 2_ε tutorial.

The `interacttfssample.tex` file can be used as a template for a manuscript by cutting, pasting, inserting and deleting text as appropriate, using the preamble and the L^AT_EX environments provided (e.g. `\begin{abstract}`, `\begin{keywords}`).

1.1. The Interact class file

The `interact` class file preserves the standard L^AT_EX 2_ε interface such that any document that can be produced using `article.cls` can also be produced with minimal alteration using the `interact` class file as described in this document.

If your article is accepted for publication it will be typeset as the journal requires in Minion Pro and/or Myriad Pro. Since most authors will not have these fonts installed, the page make-up is liable to alter slightly with the change of font. Also, the `interact` class file produces only single-column format, which is preferred for peer review and will be converted to two-column format by the typesetter if necessary during preparation of the proofs. Please therefore do not try to match the typeset format exactly, but use the standard L^AT_EX fonts instead and ignore details such as slightly long lines of text or

figures/tables not appearing in exact 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 document that correctly shows 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 manuscripts prepared using L^AT_EX

Manuscripts for possible publication should be submitted to the Editors for review as directed in the journal’s Instructions for Authors, and in accordance with any technical instructions provided in the journal’s ScholarOne Manuscripts or Editorial Manager site. Your L^AT_EX source file(s), the class file and any graphics files will be required in addition to the final PDF version when final, revised versions of accepted manuscripts are submitted.

Please ensure that any author-defined macros used in your article are gathered together in the preamble of your .tex file, i.e. before the `\begin{document}` command. Note that if serious problems are encountered in the coding of a document (missing author-defined macros, for example), the typesetter may resort to rekeying it.

2. Using the interact class file

For convenience, simply copy the `interact.cls` file into the same directory as your manuscript files (you do not need to install it in your T_EX distribution). In order to use the `interact` document class, replace the command `\documentclass{article}` at the beginning of your document with the command `\documentclass{interact}`.

The following document-class options should *not* be used with the `interact` class file:

- `10pt`, `11pt`, `12pt` – unavailable;
- `oneside`, `twoside` – not necessary, `oneside` is the default;
- `leqno`, `titlepage` – should not be used;
- `twocolumn` – should not be used (see Subsection 1.1);
- `onecolumn` – not necessary as it is the default style.

To prepare a manuscript for a journal that is printed in A4 (two column) format, use the `largeformat` document-class option provided by `interact.cls`; otherwise the class file produces pages sized for B5 (single column) format by default. The `geometry` package should not be used to make any further adjustments to the page dimensions.

3. Additional features of the interact class file

3.1. Title, authors’ names and affiliations, abstracts and article types

The title should be generated at the beginning of your article using the `\maketitle` command. In the final version the author name(s) and affiliation(s) must be followed immediately by `\maketitle` as shown below in order for them to be displayed in your PDF document. To prepare an anonymous version for double-blind peer review, you can put the `\maketitle` between the `\title` and the `\author` in order to hide the author name(s) and affiliation(s) temporarily. Next you should include the abstract if

your article has one, enclosed within an `abstract` environment. The `\articletype` command is also provided as an *optional* element which should *only* be included if your article actually needs it. For example, the titles for this document begin as follows:

```
\articletype{ARTICLE TEMPLATE}

\title{Taylor \& Francis \LaTeX\ template for authors (\textsf{Interact}
layout + reference style S)}

\author{
\name{A.~N. Author\textsuperscript{a}\thanks{CONTACT A.~N. Author.
Email: latex.helpdesk@tandf.co.uk} and John Smith\textsuperscript{b}}
\affil{\textsuperscript{a}Taylor \& Francis, 4 Park Square, Milton
Park, Abingdon, UK; \textsuperscript{b}Institut f\"{u}r Informatik,
Albert-Ludwigs-Universit\"{a}t, Freiburg, Germany} }

\maketitle
```

```
\begin{abstract}
This template is for authors who are preparing a manuscript for a
Taylor \& Francis journal using the \LaTeX\ document preparation system
and the \texttt{interact} class file, which is available via selected
journals' home pages on the Taylor \& Francis website.
\end{abstract}
```

An additional abstract in another language (preceded by a translation of the article title) may be included within the `abstract` environment if required.

A graphical abstract may also be included if required. Within the `abstract` environment you can include the code

```
\\resizebox{25pc}{!}{\includegraphics{abstract.eps}}
```

where the graphical abstract is to appear, where `abstract.eps` is the name of the file containing the graphic (note that `25pc` is the recommended maximum width, expressed in pica, for the graphical abstract in your manuscript).

3.2. Abbreviations

A list of abbreviations may be included if required, enclosed within an `abbreviations` environment, i.e. `\begin{abbreviations}... \end{abbreviations}`, immediately following the `abstract` environment.

3.3. Keywords

A list of keywords may be included if required, enclosed within a `keywords` environment, i.e. `\begin{keywords}... \end{keywords}`. Additional keywords in other languages (preceded by a translation of the word ‘keywords’) may also be included within the `keywords` environment if required.

3.4. Subject classification codes

AMS, JEL or PACS classification codes may be included if required. The `interact` class file provides an `amscode` environment, i.e. `\begin{amscode}...\end{amscode}`, a `jelcode` environment, i.e. `\begin{jelcode}...\end{jelcode}`, and a `pacscode` environment, i.e. `\begin{pacscode}...\end{pacscode}` to assist with this.

3.5. Additional footnotes to the title or authors' names

The `\thanks` command may be used to create additional footnotes to the title or authors' names if required. Footnote symbols for this purpose should be used in the order * (coded as `*`), † (`\dagger`), ‡ (`\ddagger`), § (`\S`), ¶ (`\P`), || (`\lvert`), †† (`$\dagger\dagger$`), ‡‡ (`$\ddagger\ddagger$`), §§ (`$\S\S$`), ¶¶ (`$\P\P$`).

Note that any footnotes to the main text will automatically be assigned the superscript symbols 1, 2, 3, etc. by the class file.¹

4. Some guidelines for using the standard features of L^AT_EX

4.1. Sections

The `Interact` layout style allows for five levels of section heading, all of which are provided in the `interact` class file using the standard L^AT_EX commands `\section`, `\subsection`, `\subsubsection`, `\paragraph` and `\subparagraph`. Numbering will be automatically generated for all these headings by default.

4.2. Lists

Numbered lists are produced using the `enumerate` environment, which will number each list item with arabic 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 at level one.

Bulleted lists are produced using the `itemize` environment. For example,

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

¹If 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.

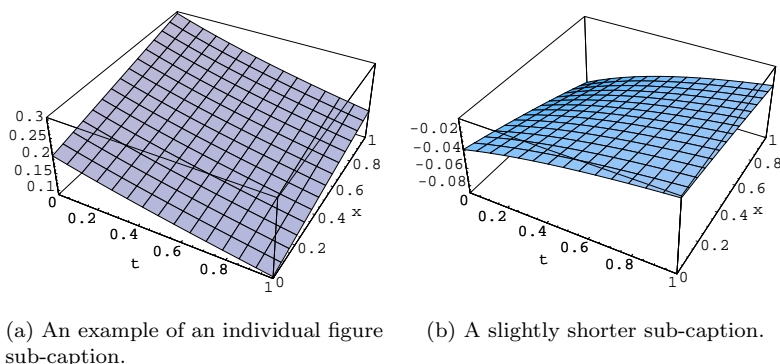


Figure 1. Example of a two-part figure with individual sub-captions showing that captions are flush left and justified if greater than one line of text.

was produced by

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

4.3. Figures

The `interact` class file will deal with positioning your figures in the same way as standard \LaTeX . It should not normally be necessary to use the optional `[htb]` location specifiers of the `figure` environment in your manuscript; you may, however, find the `[p]` placement option or the `endfloat` package useful if a journal insists on the need to separate figures from the text.

Figure captions appear below the figures themselves, therefore the `\caption` command should appear after the body of the figure. For example, Figure 1 with caption and sub-captions is produced using the following commands:

```
\begin{figure}
\centering
\subfloat[An example of an individual figure sub-caption.]{%
\resizebox*{5cm}{!}{\includegraphics{graph1.eps}}}\hspace{5pt}
\subfloat[A slightly shorter sub-caption.]{%
\resizebox*{5cm}{!}{\includegraphics{graph2.eps}}}
\caption{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.} \label{sample-figure}
\end{figure}
```

To ensure that figures are correctly numbered automatically, the `\label` command should be included just after the `\caption` command, or in its argument.

The `\subfloat` command requires `subfig.sty`, which is called in the preamble of the `interacttfssample.tex` file (to allow your choice of an alternative package if preferred) and included in the `Interact \LaTeX` bundle for convenience. Please supply any additional figure macros used with your article in the preamble of your `.tex` file.

Table 1. Example of a table showing that its caption is as wide as the table itself and justified.

Class	Type					
	One	Two	Three	Four	Five	Six
Alpha ^a	A1	A2	A3	A4	A5	A6
Beta	B2	B2	B3	B4	B5	B6
Gamma	C2	C2	C3	C4	C5	C6

^aThis footnote shows how to include footnotes to a table if required.

The source files of any figures will be required when the final, revised version of a manuscript is submitted. Authors should ensure that these are suitable (in terms of lettering size, etc.) for the reductions they envisage.

The `epstopdf` package can be used to incorporate encapsulated PostScript (.eps) illustrations when using PDF \LaTeX , etc. Please provide the original .eps source files rather than the generated PDF images of those illustrations for production purposes.

4.4. Tables

The `interact` class file will deal with positioning your tables in the same way as standard \LaTeX . It should not normally be necessary to use the optional `[htb]` location specifiers of the `table` environment in your manuscript; you may, however, find the `[p]` placement option or the `endfloat` package useful if a journal insists on the need to separate tables from the text.

The `tabular` environment can be used as shown to create tables with single horizontal rules at the head, foot and elsewhere as appropriate. The captions appear above the tables in the `Interact` style, therefore the `\tbl` command should be used before the body of the table. For example, Table 1 is produced using the following commands:

```
\begin{table}
\tbl{Example of a table showing that its caption is as wide as
the table itself and justified.}
{\begin{tabular}{lcccccc} \toprule
& \multicolumn{2}{l}{Type} \\ \cmidrule{2-7}
Class & One & Two & Three & Four & Five & Six \\ \midrule
Alpha\textsuperscript{a} & A1 & A2 & A3 & A4 & A5 & A6 \\
Beta & B2 & B2 & B3 & B4 & B5 & B6 \\
Gamma & C2 & C2 & C3 & C4 & C5 & C6 \\ \bottomrule
\end{tabular}}
\tabnote{\textsuperscript{a}This footnote shows how to include
footnotes to a table if required.}
\label{sample-table}
\end{table}
```

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

The `\toprule`, `\midrule`, `\bottomrule` and `\cmidrule` commands are those used by `booktabs.sty`, which is called by the `interact` class file and included in the `Interact` \LaTeX bundle for convenience. Tables produced using the standard commands of the `tabular` environment are also compatible with the `interact` class file.

4.5. Landscape pages

If a figure or table is too wide to fit the page it will need to be rotated, along with its caption, through 90° anticlockwise. Landscape figures and tables can be produced using the `rotating` package, which is called by the `interact` class file. The following commands (for example) can be used to produce such pages.

```
\setcounter{figure}{1}
\begin{sidewaysfigure}
\centerline{\epsfbox{figname.eps}}
\caption{Example landscape figure caption.}
\label{landfig}
\end{sidewaysfigure}

\setcounter{table}{1}
\begin{sidewaystable}
\tbl{Example landscape table caption.}
{\begin{tabular}{@{}llllc1l}
.
.
.
\end{tabular}}\label{landtab}
\end{sidewaystable}
```

Before any such float environment, use the `\setcounter` command as above to fix the numbering of the caption (the value of the counter being the number given to the preceding figure or table). Subsequent captions will then be automatically renumbered accordingly. The `\epsfbox` command requires `epsfig.sty`, which is called by the `interact` class file and is also included in the `Interact LATEX` bundle for convenience.

Please note that if the `endfloat` package is used, one or both of the commands

```
\DeclareDelayedFloatFlavor{sidewaysfigure}{figure}
\DeclareDelayedFloatFlavor{sidewaystable}{table}
```

will need to be included in the preamble of your `.tex` file, after the `endfloat` package is loaded, in order to process any landscape figures and/or tables correctly.

4.6. Theorem-like structures

A predefined `proof` environment is provided by the `amsthm` package (which is called by the `interact` 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. □

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, definition, remark, etc.) need to be defined as required, e.g. using `\newtheorem{theorem}{Theorem}` in the preamble of your .tex file (see the preamble of `interacttffsample.tex` for more examples). You can define the numbering scheme for these structures however suits your article best. Please note that the format of the text in these environments may be changed if necessary to match the style of individual journals by the typesetter during preparation of the proofs.

4.7. Mathematics

4.7.1. Displayed mathematics

The `interact` class file will set displayed mathematical formulas centred on the page without equation numbers if you use the `displaymath` environment or the equivalent `\[...\]` construction. For example, the equation

$$\hat{\theta}_{w_i} = \hat{\theta}(s(t, \mathcal{U}_{w_i}))$$

was typeset using the commands

```
\[
\hat{\theta}_{w_i} = \hat{\theta}(s(t, \mathcal{U}_{w_i}))
\]
```

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

$$\hat{\theta}_{w_i} = \hat{\theta}(s(t, \mathcal{U}_{w_i})) \tag{1}$$

was typeset using the commands

```
\begin{equation}
\hat{\theta}_{w_i} = \hat{\theta}(s(t, \mathcal{U}_{w_i}))
\end{equation}
```

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

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

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

which was typeset using the commands

```
\begin{subequations} \label{subeqnexample}
\begin{equation}
\varepsilon \rho w_{tt}(s, t) = N[w_s(s, t), w_{st}(s, t)]_s,
\label{subeqnparta}
\end{equation}
\begin{equation}
w_{tt}(1, t) + N[w_s(1, t), w_{st}(1, t)] = 0, \quad \label{subeqnpartb}
\end{equation}
\end{subequations}
```


This is made possible by the `amsmath` package, which is called by the class file. If you put a `\label` just after the `\begin{subequations}` command, references can be made to the collection of equations, i.e. ‘(2)’ in the example above. Or, as the example also shows, you can label and refer to each equation individually – i.e. ‘(2a)’ and ‘(2b)’.

Displayed mathematics should be given end-of-line punctuation appropriate to the running text sentence of which it forms a part, if required.

4.7.2. Math fonts

4.7.2.1. Superscripts and subscripts. Superscripts and subscripts will automatically come out in the correct size in a math environment (i.e. enclosed within `\(...\)` or `\$...\$` commands in running text, or within `\[...\]` or the `equation` environment for displayed equations). Sub/superscripts that are physical variables should be italic, whereas those that are labels should be roman (e.g. C_p , T_{eff}). If the subscripts or superscripts need to be other than italic, they must be coded individually.

4.7.2.2. Upright Greek characters and the upright partial derivative sign.

Upright lowercase Greek characters can be obtained by inserting the letter ‘u’ in the control code for the character, e.g. `\umu` and `\upi` produce μ (used, for example, in the symbol for the unit microns – μm) and π (the ratio of the circumference of a circle to its diameter). Similarly, the control code for the upright partial derivative ∂ is `\upartial`. Bold lowercase as well as uppercase Greek characters can be obtained by `\bm \gamma`, for example, which gives γ , and `\bm \Gamma`, which gives Γ .

Acknowledgement(s)

An unnumbered section, e.g. `\section*{Acknowledgements}`, may be used for thanks, etc. if required and included *in the non-anonymous version* before any Notes or References.

Disclosure statement

An unnumbered section, e.g. `\section*{Disclosure statement}`, may be used to declare any potential conflict of interest and included *in the non-anonymous version* before any Notes or References, after any Acknowledgements and before any Funding information.

Funding

An unnumbered section, e.g. `\section*{Funding}`, may be used for grant details, etc. if required and included *in the non-anonymous version* before any Notes or References.

Notes on contributor(s)

An unnumbered section, e.g. `\section*{Notes on contributors}`, may be included *in the non-anonymous version* if required. A photograph may be added if requested.

Nomenclature/Notation

An unnumbered section, e.g. `\section*{Nomenclature}` (or `\section*{Notation}`), may be included if required, before any Notes or References.

Notes

An unnumbered ‘Notes’ section may be included before the References (if using the `endnotes` package, use the command `\theendnotes` where the notes are to appear, instead of creating a `\section*`).

5. References

5.1. References cited in the text

References should be cited in the text by numbers in square brackets based on the order in which they appear in an alphabetical list of references at the end of the document (not the order of citation), so the first reference cited in the text might be [23]. For example, these may take the forms [32], [5, 6, 14], [21–55] (*not* [21]–[55]). For further details on this reference style, see the Instructions for Authors on the Taylor & Francis website.

Each bibliographic entry has a key, which is assigned by the author and is used to refer to that entry in the text. In this document, the key `Ali95` in the citation form `\cite{Ali95}` produces ‘[1]’, and the keys `Bow76` and `BGP02` in the citation form `\cite{Bow76,BGP02}` produce ‘[2, 3]’. The citation for a range of bibliographic entries (e.g. ‘[4–21]’) will automatically be produced by `\cite{GMW81,Hor96,Con96,Har97,FGK03,Fle80,Ste98,Ell98,Str97,Coo03,Kih01,Hol03,Hai01,Hag03,Hov03,Mul00,GHGsoft,Pow00}`. Optional notes may be included at the beginning and/or end of a citation by the use of square brackets, e.g. `\cite[cf.]{}{Tay03}` produces ‘[cf. 22]’, and `\cite[see][and references therein]{Wei95}` produces ‘[see 23, and references therein]’.

5.2. The list of references

To produce the list of references, the bibliographic data about each reference item should be listed in `thebibliography` environment in alphabetical order. References with the same author or group of authors are further sorted chronologically, beginning with the earliest. The following list shows some sample references prepared in Taylor & Francis’ Reference Style S.

References

- [1] S. Alinhac, *Blowup for Nonlinear Hyperbolic Equations*, Progress in Nonlinear Differential Equations and Applications Vol. 17, Birkhäuser, Boston, MA, 1995.
- [2] F.E. Bowder (ed.), *Nonlinear Operators and Nonlinear Equations of Evolution in Banach Spaces*, Proceedings of Symposia in Pure Mathematics Vol. 18, Part 2, American Mathematical Society, Providence, RI, 1976.

- [3] J. Burckhardt, M. Gunzburger, and J. Peterson, *Insensitive functionals, inconsistent gradients, spurious minima, and regularized functionals in flow optimization problems*, Int. J. Comput. Fluid Dyn. 16 (2002), pp. 171–185.
- [4] A.R. Conn and P.L. Toint, *An algorithm using quadratic interpolation*, in *Nonlinear Optimization and Applications*, G. Di Pillo and F. Giannessi, eds., Kluwer Academic/Plenum Publishers, New York, 1996, pp. 27–47.
- [5] I.D. Coope and C.J. Price, *Positive bases in numerical optimization*, Comput. Optim. Appl. 21 (2003), pp. 169–175.
- [6] J.S. Ellenberg, *Hilbert modular forms and the Galois representations associated to Hilbert-Blumenthal abelian varieties*, Ph.D. diss., Harvard University, 1998.
- [7] R. Fletcher, *Practical Methods of Optimization*, 2nd ed., Vol. 2, Wiley and Sons, New York, 1980.
- [8] R. Fourer, D.M. Gay, and B.W. Kernighan, *AMPL: A Modeling Language for Mathematical Programming*, 2nd ed., Thomson/Brooks/Cole, Pacific Grove, CA, 2003.
- [9] P.E. Gill, W. Murray, and M.H. Wright, *Practical Optimization*, Academic Press, London, 1981.
- [10] T.G. Golda, P.D. Hough, and G. Gay, *APPSPACK (Asynchronous parallel pattern search package)*. Software available at <http://software.sandia.gov/appspack>.
- [11] J. Haglund, *Conjectured statistics for the q, t -Catalan numbers*, preprint (2003), to appear in Adv. Math. Available at <http://www.math.upenn.edu/~jhaglund>.
- [12] M. Haiman, *Hilbert schemes, polygraphs, and the Macdonald positivity conjecture*, J. Amer. Math. Soc. 14 (2001), pp. 941–1006. Available at <http://www.math.berkeley.edu/~mhaiman>. MR 2002c:14008
- [13] W.E. Hart, *A stationary point convergence theory of evolutionary algorithms*, in *Foundations of Genetic Algorithms 4*, R.K. Belew and M.D. Vose, eds., Morgan Kaufmann, San Francisco, 1997, pp. 127–134.
- [14] J. Holt, *Multiple bumping of components of deformation spaces of hyperbolic 3-manifolds*, Amer. J. Math. 125 (2003), pp. 691–736. Available at <http://muse.jhu.edu/journals/american-journal-of-mathematics/v125/125.4holt.pdf>.
- [15] U. Hornung (ed.), *Homogenization and Porous Media*, Springer, Berlin, 1996.
- [16] P. Hovland, *Automatic differentiation and its role in simulation-based optimization*, IMA Workshop, Minneapolis, MN, 2003.
- [17] S. Kihara, *On an elliptic curve over $Q(t)$ of rank ≥ 14* , Proc. Japan Acad. Ser. A Math. Sci. 77 (2001), pp. 50–51. MR 2002a:11057
- [18] *MultiSimplex 2.0*. Grabitech Solutions AB, Sundvall, Sweden, 2000; software available at <http://www.multisimplex.com>.
- [19] M.J.D. Powell, *On the Lagrange functions of quadratic models that are defined by interpolation*, Tech. Rep. DAMTP 2000/NA10, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Cambridge, UK, 2000.
- [20] G.W. Stewart, *Matrix Algorithms. Volume 1: Basic Decompositions*, SIAM, Philadelphia, 1998.
- [21] N.P. Strickland, *Finite subgroups of formal groups*, J. Pure Appl. Algebra 121 (1997), pp. 161–208.
- [22] R. Taylor, *On the meromorphic continuation of degree two L -functions*, preprint (2003). Available at <http://abel.math.harvard.edu/~rtaylor/>.
- [23] A. Weil, *Basic Number Theory*, Springer-Verlag, Berlin, 1995.

This was produced by typing:

```
\begin{thebibliography}{99}
```

```
\bibitem{Ali95}
```

```
S. Alinhac, \emph{Blowup for Nonlinear Hyperbolic Equations}, Progress  
in Nonlinear Differential Equations and Applications Vol.~17,
```

Birkh{\a}user, Boston, MA, 1995.

\bibitem{Bow76}

F.E. Bowder (ed.), \emph{Nonlinear Operators and Nonlinear Equations of Evolution in Banach Spaces}, Proceedings of Symposia in Pure Mathematics Vol. 18, Part~2, American Mathematical Society, Providence, RI, 1976.

\bibitem{BGP02}

J. Burckhardt, M. Gunzburger, and J. Peterson, \emph{Insensitive functionals, inconsistent gradients, spurious minima, and regularized functionals in flow optimization problems}, Int. J. Comput. Fluid Dyn. 16 (2002), pp. 171--185.

\bibitem{Con96}

A.R. Conn and P.L. Toint, \emph{An algorithm using quadratic interpolation}, in \emph{Nonlinear Optimization and Applications}, G. Di~Pillo and F. Giannessi, eds., Kluwer Academic/Plenum Publishers, New York, 1996, pp. 27--47.

\bibitem{Coo03}

I.D. Coope and C.J. Price, \emph{Positive bases in numerical optimization}, Comput. Optim. Appl. 21 (2003), pp. 169--175.

\bibitem{Ell98}

J.S. Ellenberg, \emph{Hilbert modular forms and the Galois representations associated to Hilbert-Blumenthal abelian varieties}, Ph.D. diss., Harvard University, 1998.

\bibitem{Fle80}

R. Fletcher, \emph{Practical Methods of Optimization}, 2nd ed., Vol.~2, Wiley and Sons, New York, 1980.

\bibitem{FGK03}

R. Fourer, D.M. Gay, and B.W. Kernighan, \emph{AMPL: A Modeling Language for Mathematical Programming}, 2nd ed., Thomson/Brooks/Cole, Pacific Grove, CA, 2003.

\bibitem{GMW81}

P.E. Gill, W. Murray, and M.H. Wright, \emph{Practical Optimization}, Academic Press, London, 1981.

\bibitem{GHGsoft}

T.G. Golda, P.D. Hough, and G. Gay, \emph{APPSPACK (Asynchronous parallel pattern search package)}. Software available at <http://software.sandia.gov/appspack>.

\bibitem{Hag03}

J. Haglund, \emph{Conjectured statistics for the $\{q,t\}$ -Catalan numbers}, preprint (2003), to appear in Adv. Math. Available at

<http://www.math.upenn.edu/~jaglund>.

\bibitem{Hai01}

M. Haiman, \emph{Hilbert schemes, polygraphs, and the Macdonald positivity conjecture}, J. Amer. Math. Soc. 14 (2001), pp. 941--1006. Available at <http://www.math.berkeley.edu/~mhaiman>.
MR~2002c:14008

\bibitem{Har97}

W.E. Hart, \emph{A stationary point convergence theory of evolutionary algorithms}, in \emph{Foundations of Genetic Algorithms 4}, R.K. Belew and M.D. Vose, eds., Morgan Kaufmann, San Francisco, 1997, pp. 127--134.

\bibitem{Hol03}

J. Holt, \emph{Multiple bumping of components of deformation spaces of hyperbolic 3-manifolds}, Amer. J. Math. 125 (2003), pp. 691--736. Available at http://muse.jhu.edu/journals/american/_journal/_of/_mathematics/v125/125.4holt.pdf.

\bibitem{Hor96}

U. Hornung (ed.), \emph{Homogenization and Porous Media}, Springer, Berlin, 1996.

\bibitem{Hov03}

P. Hovland, \emph{Automatic differentiation and its role in simulation-based optimization}, IMA Workshop, Minneapolis, MN, 2003.

\bibitem{Kih01}

S. Kihara, \emph{On an elliptic curve over $\mathbb{Q}(t)$ of rank ≥ 14 }, Proc. Japan Acad. Ser. A Math. Sci. 77 (2001), pp. 50--51.
MR~2002a:11057

\bibitem{Mul00}

\emph{MultiSimplex 2.0}. Grabitech Solutions AB, Sundvall, Sweden, 2000; software available at <http://www.multisimplex.com>.

\bibitem{Pow00}

M.J.D. Powell, \emph{On the Lagrange functions of quadratic models that are defined by interpolation}, Tech. Rep. DAMTP 2000/NA10, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Cambridge, UK, 2000.

\bibitem{Ste98}

G.W. Stewart, \emph{Matrix Algorithms. Volume 1: Basic Decompositions}, SIAM, Philadelphia, 1998.

\bibitem{Str97}

N.P. Strickland, \emph{Finite subgroups of formal groups}, J. Pure Appl. Algebra 121 (1997), pp. 161--208.

```

\bibitem{Tay03}
R. Taylor, \emph{On the meromorphic continuation of degree two
L-functions}, preprint (2003). Available at
http://abel.math.harvard.edu/$\sim$rtaylor/.

\bibitem{Wei95}
A. Weil, \emph{Basic Number Theory}, Springer-Verlag, Berlin, 1995.

\end{thebibliography}

```

Each entry takes the form:

```
\bibitem{key} Bibliography entry
```

where ‘key’ is the tag that is to be used as an argument for the `\cite{}` commands in the text of the article and ‘Bibliography entry’ is the material that is to appear in the list of references, suitably formatted. The commands

```

\usepackage[numbers,sort&compress]{natbib}
\bibpunct[, ]{[{}]}{,}{n}{,}{,}
\renewcommand\bibfont{\fontsize{10}{12}\selectfont}

```

need to be included in the preamble of your .tex file in order to generate the citations and bibliography as described above.

Instead of typing the bibliography by hand, you may prefer to create the list of references using a BIB_{TEX} database. In order to do this, the `tfs.bst` file needs to be in your working folder or an appropriate directory, and the lines

```

\bibliographystyle{tfs}
\bibliography{interacttffssample}

```

included where the list of references is to appear, where `tfs.bst` is the name of the BIB_{TEX} bibliography style file for Taylor & Francis’ Reference Style S and `interacttffssample.bib` is the bibliographic database included with the Interact-TFS L^AT_EX/BIB_{TEX} bundle (to be replaced with the name of your own .bib file). L^AT_EX/BIB_{TEX} will extract from your .bib file only those references that are cited in your .tex file and list them in the References section.

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.

6. Appendices

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

```

\appendix
\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. Some theorem-like environments may need to have their counters reset manually (e.g. if they are not numbered within sections in the main text). You can achieve this by using `\numberwithin{remark}{section}` (for example) just after the `\appendix` command.

Note that if the `endfloat` package is used on a document containing any appendices, the `\processdelayedfloats` command must be included immediately before the `\appendix` command in order to ensure that the floats belonging to the main body of the text are numbered as such.

Appendix A. Troubleshooting

Authors may occasionally encounter problems with the preparation of a manuscript using L^AT_EX. The appropriate action to take will depend on the nature of the problem:

- (i) If the problem is with L^AT_EX itself, rather than with the actual macros, please consult an appropriate L^AT_EX 2_ε manual for initial advice. If the solution cannot be found, or if you suspect that the problem does lie with the macros, then please contact Taylor & Francis for assistance (latex.helpdesk@tandf.co.uk), clearly stating the title of the journal to which you are submitting.
- (ii) Problems with page make-up (e.g. occasional overlong lines of text; figures or tables appearing out of order): please do not try to fix these using ‘hard’ page make-up commands – the typesetter will deal with such problems. (You may, if you wish, draw attention to particular problems when submitting the final version of your manuscript.)
- (iii) If a required font is not available on your system, allow T_EX to substitute the font and specify which font is required in a covering letter accompanying your files.

Appendix B. Obtaining the template and class file

B.1. Via the Taylor & Francis website

This article template and the `interact` class file may be obtained via the ‘Instructions for Authors’ pages of selected Taylor & Francis journals.

Please note that the class file calls up the open-source L^AT_EX packages `booktabs.sty`, `epsfig.sty` and `rotating.sty`, which will, for convenience, unpack with the downloaded template and class file. The template calls for `natbib.sty` and `subfig.sty`, which are also supplied for convenience.

B.2. Via e-mail

This article template, the `interact` class file and the associated open-source L^AT_EX packages are also available via e-mail. Requests should be addressed to latex.helpdesk@tandf.co.uk, clearly stating for which journal you require the template and class file.