Author Usage Template for Liebert Journals

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Abstract: This document presents a number of hints about how to set up your *Science* paper in LaTeX. We provide a template file, `Liebert_sample.tex`, that you can use to set up the LaTeX source for your article. An example of the style is the special {`abstract`} environment used to set up the abstract you see here.

1 Front Matter

Please follows the below tags for front matter part for your article:

```
\title{Article Title}


\author{Author 1,$^{1\ast}$ Author 2,$^{1}$ Author 3$^{2}$\\
```

```
{$^{1}$Department of Chemistry, University of Wherever,}\\
{An Unknown Address, Wherever, ST 00000, USA}\\
{$^{2}$Another Unknown Address, Palookaville, ST 99999, USA}\\
{$^\ast$To whom correspondence should be addressed;
E-mail:  jsmith@wherever.edu.}
}
\maketitle
```

2 Abstract

Use the tag:

```
\begin{abstract}
  This document presents a number of hints about how to set up your
  \textit{Science} paper in \LaTeX.  We provide a template file,
  \texttt{Liebert_sample.tex}, that you can use to set up the \LaTeX\ source
  for your article.  An example of the style is the special
  \texttt{\{abstract\}} environment used to set up the abstract you
  see here.
\end{abstract}
```

3 Introduction

In this file, we present some tips and sample mark-up to assure your LaTeX file of the smoothest possible journey from review manuscript to published paper. We focus here particularly on issues related to headings, citations, and maths, tables, and figures, as those tend to be the biggest sticking points. Please use the source file for this document, `Liebert_sample.tex`, as a template for your

manuscript, cutting and pasting your content into the file at the appropriate places.

3.1 Headings

Use the standard tags `\section, \subsection, \subsubsection, \paragraph` and `\subparagraph` for the Headings `H1, H2, H3, H4` and `H5` respectively.

3.2 Handling Math, Tables, and Figures

We suggest to use `mathtools.sty` file to get various types of display math styles. Few of the coding are given below for easy reference:

`equation`

`align`

`\[...\]` or `equation*`

`gather`

Various types of matrices, e.g., `pmatrix`, `bmatrix`, `vmatrix`, `smallmatrix` etc.

`alignat`

3.3 Tables

We suggest to use `threeparttable.sty` file to get the tables and its notes in a proper way. Example given below:

```
\begin{table}
\begin{threeparttable}
\caption{Time of the Transition Between Phase 1 and Phase 2\tnote{$a$}
\label{tab:label}}
\begin{tabular}{@{}ll}
\toprule
```

```
 Run  & Time (min)  \\
\midrule
  \textit{l}1  & 260   \\
  \textit{l}2  & 300   \\
  \textit{l}3  & 340   \\
  \textit{h}1  & 270   \\
  \textit{h}2  & 250   \\
  \textit{h}3  & 380   \\
  \textit{r}1  & 370   \\
  \textit{r}2  & 390   \\
\bottomrule
\end{tabular}
\begin{tablenotes}[flushleft]\footnotesize
\item[${a}$]Table note text here.
\end{tablenotes}
\end{threeparttable}
\end{table}
```

Output

Table 1: Time of the Transition Between Phase 1 and Phase 2[a]

Run	Time (min)
$l1$	260
$l2$	300
$l3$	340
$h1$	270
$h2$	250
$h3$	380
$r1$	370
$r2$	390

[a] Table note text here.

Spanning rules

Use `\cmidrule` to obtain spanning of rules from column to column, usage is:

```
\cmidrule{fromcolumn-tocolumn}, e.g, \cmidrule{2-3}
```

3.4 Figures

Figure callouts within the text should be in the form of LaTeX references, e.g., `\ref{fig1}`. For the figures themselves, treatment can differ depending on whether the manuscript is an initial submission or a final revision for acceptance and publication. For an initial submission and review copy, you can use the LaTeX `{figure}` environment and the `\includegraphics` command to include your PostScript figures at the end of the compiled file. For the final revision, however, the `{figure}` environment should *not* be used; instead, the figure captions themselves should be typed in as regular text at the end of the source file (an example is included here), and the figures should be uploaded separately according to the Art Department's instructions.

Landscape Images/Tables

Please use `\begin{sidewaystable}...\end{sidewaystable}` and `\begin{sidwaysfigure}...\end{sidewaysfigure}` for to get rotating figures/tables.

For inline image please use the tag shown as below:

```
\bigskip


\includegrahics{figure.eps}


\bigskip
```

4 Algorithms

For `Algorithms` please use the standard LaTeX supporting file `algorithm2e.sty`, the format and the output given below:

```
\begin{algorithm}[h!]
\SetAlgoLined
\SetKwFunction{IL}{InitializeDistance}
\SetKwFunction{PL}{PropagateInsertion}
\SetKwFunction{MIN}{Min}
\SetKwFunction{MX}{Max}
\SetKwFunction{TOP}{Top}
\SetKwFunction{Push}{Push}
\SetKwFunction{Pop}{Pop}
\SetKwFunction{Append}{Append}
\SetKwData{Queue}{Queue}
\KwResult{The length of shortest path from $s$ to $t$}
 $PreviousLayer=[s]$\;
 $s.distance = 0$\;
 \For(\tcc*[f]{Do the computation layer by layer}){i = 1 \KwTo m}{
   $CurrentLayer = [(i,v_1),(i,v_{2}),\ldots, (i,v_{n}), (i,k)]$\;
   $x.distance = \infty \ \forall  x \in CurrentLayer$\;
   \IL{PreviousLayer,CurrentLayer}\;
   \PL{CurrentLayer}\;
   $PreviousLayer = CurrentLayer$\;
 }
 \KwRet{\MIN{PreviousLayer.distance}}\;
 \caption{Algorithm for sequence to graph alignment}
 \label{algo:linear}
```

```
\end{algorithm}
```

Output

Algorithm 1: Algorithm for sequence to graph alignment

Result: The length of shortest path from s to t
$PreviousLayer = [s]$;
$s.distance = 0$;
for $i = 1$ **to** m **do** `/* Do the computation layer by layer */`
  $CurrentLayer = [(i, v_1), (i, v_2), \ldots, (i, v_n), (i, k)]$;
  $x.distance = \infty \; \forall x \in CurrentLayer$;
  `InitializeDistance(`*PreviousLayer,CurrentLayer*`)`;
  `PropagateInsertion(`*CurrentLayer*`)`;
  $PreviousLayer = CurrentLayer$;
end
return `Min(`*PreviousLayer.distance*`)`;

5 Lists

Please use the standard tags for Numbered lists and Bulleted lists, e.g.,

Numbered lists

```
\begin{enumerate}

\item Text for first level numbered lists text text text text

Text for first level numbered lists text text text text

\begin{enumerate}

\item Text for second level numbered lists text text text text

Text for first level numbered lists text text text text

\item text text text text Text for first level numbered lists

text text text text

\end{enumerate}

\item text text text text Text for first level numbered lists
```

```
text text text text
\end{enumerate}
```

Output

1. Text for first level numbered lists text text text text Text for first level numbered lists text text text text

   (a) Text for second level numbered lists text text text text Text for first level numbered lists text text text text

   (b) text text text text Text for first level numbered lists text text text text

2. text text text text Text for first level numbered lists text text text text

Bulleted lists

```
\begin{itemize}
\item Text for first level bulleted lists text text text text
Text for first level bulleted lists text text text text
\begin{itemize}
\item Text for second level bulleted lists text text text text
Text for first level bulleted lists text text text text
\item text text text text Text for first level bulleted lists
text text text text
\end{itemize}
\item text text text text Text for first level bulleted lists
text text text text
\end{itemize}
```

Output

- Text for first level bulleted lists text text text text Text for first level bulleted lists text text text text
  - Text for second level bulleted lists text text text text Text for first level bulleted lists text text text text
  - text text text text Text for first level bulleted lists text text text text
- text text text text Text for first level bulleted lists text text text text

Extract/Quote

Use the standard tag `\begin{quote}...\end{quote}` for quoted text, e.g.,

```
\begin{quote}
Text for quoted text text text text text text text text text text text
text text text text text text text text text text text text text text
\end{quote}
```

Output

> Text for quoted text text text text text text text text text text text
> text text text text text text text text text text text text text text

6 Footnote

Use standard LaTeX tag `\footnote` to get the footnotes at the bottom of the page.

7 Special fonts

Use standard LaTeX tags `\mathcal`, `\mathscr`, and `\mathbb` to get the characters in special fonts like $\mathcal{A}, \mathscr{A}$ and $\mathbb{A}$, respectively

8 Enunciation or Math heads

Generally `theorem`, `lemma`, etc. are called as Enunciation or Math heads. In this template we defined some standard enunciations (`theorem`, `lemma`, `corollary` in the template.

Sample input/Output

8.1 Input

```
\begin{theorem}
This is for test for math head ‘‘Theorem’’ text text text text
Text for first level numbered lists text text text text
\end{theorem}
```

8.2 Output

Theorem 1. *This is for test for math head "Theorem" text text text text Text for first level numbered lists text text text text*

8.3 Define own Math Heads/Enunciation

You allowed to define your own enunciations and the format is given below:

```
\newtheorem{short name of the head}{Head to Display}
```

Example

If you need to define group of text under the head "Proposition", then you have to define as

```
\newtheorem{proposition}{Proposition}
```

Proposition 1. *This is for test for math head "Theorem" text text text text Text for first level numbered lists text text text text*

8.4 Unnumbered Math Heads/Enunciation

Just introduce `*`, which makes the numbered math head text into unnumbered math head, e.g.,

```
\begin{theorem*}
This is for test for math head ‘‘Theorem’’ text text text text
Text for first level numbered lists text text text text
\end{theorem*}
```

Theorem. *This is for test for unnumbered math head "Theorem" text text text text Text for first level numbered lists text text text text*

9 Bibliography/References

We suggest you to use the package `natbib.sty` to achieve various types of bibliography entries. It supports both numbered and name&year style references, and its cross links. The details are given below:

9.1 Formatting Citations

Type	Results
`\citet{jon90}`	Jones et al. (1990)
`\citet[chap. 2]{jon90}`	Jones et al. (1990, chap. 2)
`\citep{jon90}`	(Jones et al., 1990)
`\citep[chap. 2]{jon90}`	(Jones et al., 1990, chap. 2)
`\citep[see][]{jon90}`	(see Jones et al., 1990)
`\citep[see][chap. 2]{jon90}`	(see Jones et al., 1990, chap. 2)
`\citet*{jon90}`	Jones, Baker, and Williams (1990)
`\citep*{jon90}`	(Jones, Baker, and Williams, 1990)

10 Notes

We have already included all the required `.sty` files into the LaTeX template `Liebert_Author.cls`, hence no need to call those in your `.tex` application files.

Acknowledgments

Generallay `Acknowledgments` text either comes in frontmatter part or before end of the reference part.

References

[1] The package `natbib.sty` and its documentations are available at `https://ctan.org/pkg/natbib?lang=en`.

[2] As the mark-up of the TeX source for this document makes clear, your file should be coded in LaTeX2ε, not LaTeX 2.09 or an earlier release.

[3] Among whom are the author of this document. The "real" references and notes contained herein were compiled using BIBTEX from the `sample.bib` file.

11 To add any instruction to Comp

Please use the tag `\notetocomp` to display any important note/info to typesetter/comp/publisher, this will produce the output in margin, example shown below:

```
\notetocomp{Note to comp/publisher}
```

Output

This is for test this is for test

Note to comp/publisher