A simple Science Advances Template

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This document presents a number of hints about how to set up your Science Advances paper in LATEX. This template file sciadvfile.tex gives you a starting place for LATEX source for your article. An example of the style is the special {sciabstract} environment used to set up the abstract you see here.

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 *Science Advances* paper. We focus here particularly on issues related to style files, citation, and math, tables, and figures, as those tend to be the biggest sticking points. Please use the source file for this document, sciadvfile.tex, as a template for your manuscript, cutting and pasting your content into the file at the appropriate places.

Science Advances's publication workflow relies on Microsoft Word. To translate LATEX files into Word, AAAS uses an intermediate MS-DOS routine (1) that converts the TEX source into HTML. The routine is generally robust, but it works best if the source document is

clean LATEX without a significant freight of local macros or .sty files. Use of the source file sciadvfile.tex as a template, and calling *only* the .sty and .bst files specifically mentioned here, will generate a manuscript that should be eminently reviewable, and yet will allow your paper to proceed quickly into our production flow upon acceptance (2).

Results

Formatting Citations

Citations can be handled in one of three ways. The most straightforward (albeit labor-intensive) would be to hardwire your citations into your LaTeX source, as you would if you were using an ordinary word processor. Thus, your code might look something like this:

```
However, this record of the solar nebula may have been partly erased by the complex history of the meteorite parent bodies, which includes collision-induced shock, thermal metamorphism, and aqueous alteration (\{ 1, 2, 5--7 \}).
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Compiled, the last two lines of the code above, of course, would give notecalls in *Science Advances* style:

... thermal metamorphism, and aqueous alteration (1, 2, 5–7).

Under the same logic, the author could set up his or her reference list as a simple enumeration,

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{\bf References}
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\begin{enumerate}
\item G. Gamow, {\it The Constitution of Atomic Nuclei
and Radioactivity\/} (Oxford Univ. Press, New York, 1931).
\item W. Heisenberg and W. Pauli, {\it Zeitschr.\ f.\
Physik\/} {\bf 56}, 1 (1929).
\end{enumerate}
```

yielding

References

- G. Gamow, The Constitution of Atomic Nuclei and Radioactivity (Oxford Univ. Press, New York, 1931).
- 2. W. Heisenberg and W. Pauli, Zeitschr. f. Physik 56, 1 (1929).

That's not a solution that's likely to appeal to everyone, however — especially not to users of BIBTEX (3). If you are a BIBTEX user, we suggest that you use the ScienceAdvances.bst bibliography style file and the scicite.sty package, the latter of which is downloadable from the Science author help site (http://www.sciencemag.org/about/authors/prep/TeX_help You can also generate your reference lists by using the list environment {thebibliography} at the end of your source document; here again, you may find the scicite.sty file useful.

Whether you use BIBTeX or {thebibliography}, be very careful about how you set up your in-text reference calls and notecalls. In particular, observe the following requirements:

1. Please follow the style for references outlined at our author help site and embodied in recent issues of *Science Advances*. Each citation number should refer to a single reference; please do not concatenate several references under a single number.

- 2. Please cite your references and notes in text *only* using the standard LaTeX \cite command, not another command driven by outside macros.
- 3. Please separate multiple citations within a single \cite command using commas only; there should be *no space* between reference keynames. That is, if you are citing two papers whose bibliography keys are keyname1 and keyname2, the in-text cite should read \cite{keyname1, keyname2}, not \cite{keyname1, keyname2}.

Failure to follow these guidelines could lead to the omission of the references in an accepted paper when the source file is translated to Word via HTML.

Handling Math, Tables, and Figures

Following are a few things to keep in mind in coding equations, tables, and figures for submission to *Science Advances*.

In-line math. The utility that AAAS uses for converting from LaTeX to HTML handles in-line math relatively well. It is best to avoid using built-up fractions in in-line equations, and going for the more boring "slash" presentation whenever possible — that is, for \$a/b\$ (which comes out as a/b) rather than \$\frac{a}{b}\$ (which compiles as $\frac{a}{b}$). Likewise, HTML isn't tooled to handle certain overaccented special characters in-line; for $\hat{\alpha}$ (coded \$\hat{\alpha}\$), for example, the HTML translation code will return $[\hat{\alpha}]$. Don't drive yourself crazy — but if it's possible to avoid such constructs, please do so. Please do not code arrays or matrices as in-line math; display them instead. And please keep your coding as TeX-y as possible — avoid using specialized math macro packages like amstex.sty.

Displayed math. The AAAS HTML converter sets up TEX displayed equations using nested HTML tables. That works well for an HTML presentation, but Word chokes when it comes

across a nested table in an HTML file. That problem is circumvented by simply cutting the displayed equations out of the HTML before it's imported into Word, and then replacing them in the Word document using either images or equations generated by a Word equation editor. Strictly speaking, this procedure doesn't bear on how you should prepare your manuscript—although, for reasons best consigned to a note (4), AAAS would prefer that you use native TeX commands within displayed-math environments, rather than LATEX sub-environments.

Tables. The HTML converter that AAAS uses seems to handle reasonably well simple tables generated using the LATEX {tabular} environment. For very complicated tables, you may want to consider generating them in a word processing program and including them as a separate file.

Figures. Figure callouts within the text should not be in the form of LateX references, but should simply be typed in — that is, (Fig. 1) rather than \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 PostScript 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.

Discussion

What to Send In

What you should send to Science Advances will depend on the stage your manuscript is in:

- Important: If you're sending in the initial submission of your manuscript (that is, the copy for evaluation and peer review), please send in *only* a PostScript or PDF version of the compiled file (including figures). Please do not send in the TEX source, .sty, .bbl, or other associated files with your initial submission. (For more information, please see the instructions at the *Science Advances* web site, http://www.scienceadvances.org/.)
- When the time comes for you to send in your revised final manuscript (i.e., after peer review), AAAS requires that you include all source files and generated files in your upload.
 Thus, if the name of your main source document is ltxfile.tex, you need to include:
 - ltxfile.tex.
 - ltxfile.aux, the auxilliary file generated by the compilation.
 - A PostScript file (compiled using dvips or some other driver) of the .dvi file generated from ltxfile.tex, or a PDF file distilled from that PostScript. You do not need to include the actual .dvi file in your upload.
 - From BIBT_EX users, your bibliography (.bib) file, *and* the generated file ltxfile.bbl created when you run BIBT_EX.
 - Any additional .sty and .bst files called by the source code (though, for reasons noted earlier, we *strongly* discourage the use of such files beyond those mentioned in this document).

Supplementary Material accompanies this paper at http://www.scienceadvances.org/.

Materials and Methods

No materials or methods were harmed in the making of this template.

References

- 1. The package is TTH, available at http://hutchinson.belmont.ma.us/tth/.
- As the mark-up of the T_EX source for this document makes clear, your file should be coded in L^ΔT_EX2ε, not L^ΔT_EX 2.09 or an earlier release. Also, please use the article document class.
- 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 sciadvbib.bib, the style package scicite.sty, and the bibliography style file ScienceAdvances.bst.
- 4. One of the equation editors we use, Equation Magic (MicroPress Inc., Forest Hills, NY; http://www.micropress-inc.com/), interprets native TeX source code and generates an equation as an OLE picture object that can then be cut and pasted directly into Word. This editor, however, does not handle LaTeX environments (such as {array} or {eqnarray}); it can interpret only TeX codes. Thus, when there's a choice, we ask that you avoid these LaTeX calls in displayed math for example, that you use the TeX \matrix command for ordinary matrices, rather than the LaTeX {array} environment.

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Author Contributions JAS conceived the research. JAS and JD designed the analyses. JAS and JS conducted the analyses. All authors wrote the manuscript.

Competing Interests The authors declare that they have no competing financial interests.

Data and materials availability: Additional data and materials are available online.

Fig. 1. Please do not use figure environments to set up your figures in the final (post-peer-review) draft, do not include graphics in your source code, and do not cite figures in the text using LaTeX \ref commands. Instead, simply refer to the figure numbers in the text per *Science* style, and include the list of captions at the end of the document, coded as ordinary paragraphs as shown in the sciadvfile.tex template file. Your actual figure files should be submitted separately.