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Style Guide for Submission of Manuscripts to Notre Dame Journal of Formal Logic

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Abstract This document and its LATEX source are meant as a guide to the Notre Dame Journal of Formal Logic's (NDJFL) style and the style files ndjflart and jflnat.bst. The files will explain the formatting of an article in ndjflart and will address the style issues the Journal prefers in the articles it publishes. The abstract should be a very brief summary of the article, that is, no more than 150 words. It is lifted from the paper by indexing services and therefore should not contain citations to works in the References nor should it contain author-created macros. Limit maths and symbols to those that can be easily converted for web reading. The abstract should be in one block and not separated into paragraphs.

1 How Should You Use This Style Guide?

The *Notre Dame Journal of Formal Logic* welcomes your submission. We publish original and significant work in all areas of logic and the foundations of mathematics. Your prepared manuscript will be submitted and processed through Editorial Manager. Throughout the review process you can log in at any time and follow the progress of your manuscript.

This guide will cover the preparation of your manuscript and details on our particular style. Our hope is that you will use this style guide to help you typeset your paper. No matter which documentclass you use in composing your paper, you can easily convert it to ndjflart using the suggestions in the template. Hopefully this guide will prove useful whether you are converting a finished document to use ndjflart.cls, are in the middle of writing the paper, or are just beginning.

At the very least, this guide describes the *NDJFL* style. We reserve the right to edit your paper so it conforms to our style. If you read this, you will not be surprised when you receive your page proofs.

2010 Mathematics Subject Classification: Primary X001, Y002; Secondary Z003 Keywords: typesetting, guide for authors

M. Kummerer and P. Cholak

2 Frontmatter

This guide uses the documentclass "ndjflart" which you can download from the *NDJFL* website. It also requires the artstatus argument "am" meaning "author manuscript." When your paper is typeset, this term will be changed to incorporate the *Journal*'s fonts and settings. You should not change this.

2.1 Fonts Various options appear in the code at the beginning of this template which you can switch on or off for the fonts available to you. The *NDJFL* uses the MathTimeTM Professional 2 (MTPro2)¹ fonts for publishing. If you have them, you will know how to use them in this template.

We have available the math alphabets mathcal, mathfrak, mathscr, and mathbb (e.g., $\mathscr{A}, \mathfrak{A}, \mathscr{A}, \mathbb{A})$. We use φ by default so you do not need to redefine \phi. However, if you do need this ϕ symbol throughout your paper, you will need to \renewcommand.

Developing your own font symbol is *strongly discouraged*. If you cannot find a symbol among the standard LATEX, amssymb, and mathrsfs symbols, try the packages stmaryrd, wasy2, or others found at ctan.org.

Our titles and section headings are in optima font. Since most users do not have optima, your system will use helvetica. When you have axioms or other items that need a list heading, you can use \subsection* to create a nice flush left heading that will naturally occur in optima bold when we typeset your paper. The following is an example of using this for a list heading.

List of Our Axioms

A1 ABC A2 DEF

2.2 Author macros Load your macros in the special area between

\startlocaldefs and

\endlocaldefs.

If you "input" a special file containing your macros, be sure to include it when you are asked for source files upon acceptance of your paper.

2.3 Article data

2.3.1 Title and runtitle The title of your paper should be printed in headline-style capitalization. In general, this means that the first and last word and all major words in the title and subtitle should be uppercase. Articles (an, the, a), conjunctions (and, nor, or, but), and prepositions (by, with, for, over) should be lowercase. See *Chicago Manual of Style (CMS)* [5], especially Chapter 8.157, "Principles of headline-style capitalization," for more specific information and exceptional situations such as hyphenated words. Keep maths to a minimum in titles.

The \runtitle should be your preferred shortened version of your title. This is requested when you upload your paper to Editorial Manager (in the field called "short title"). The editors may change this during the final stages of publishing. Keep it short; it should not take up the whole width of the page. This runtitle will appear on even-numbered pages.

NDJFL Style Guide

2.3.2 Author(s) The \author{} line includes the author's name (divided into first name (\fnms{}) with middle initial, if desired, and surname (\snm{}) and e-mail address. It can also contain a web address, if desired. A separate \author{} is used for each additional author, but the \ead label is changed to e2,u2 or e3,u3, as appropriate.

On a separate line, the command \runauthor contains the data that will appear as the running head on odd-numbered pages in the article. Enter the initial(s) and surname of each author separated by "and." In a series of three or more authors the "and" is preceded by a comma. (e.g., J. A. Smith, S. Jones, and R. Miller).

The \address line contains the affiliation and address of each author. The *NDJFL* uses the U.S. Postal Service format for addresses, that is, affiliation first, university/company second, street address third, city, state/province fourth, country last. Country is printed in all uppercase. No punctuation should be used in the street, city, state lines except for the hyphen used in some countries' city codes.

2.4 Mathematics Subject Classification The *NDJFL* prints primary and, if provided, secondary, classification codes for each article. You can find the classification(s) for your article at ams.org. Choose one or more and divide them into primary and secondary, as appropriate. You will be asked to list these codes when you upload your submission to Editorial Manager.

2.5 Keywords Please list several keywords representing the content of your article. Be cautious when using symbols since they can be represented only as text in a search. Don't use macros here. They won't mean anything when separated from the manuscript.

3 Sectioning

All sections in *NDJFL* articles are numbered. The opening of your article should be the first \section and, if nothing else is appropriate, titled "Introduction." Section titles should be in headline-style capitalization (see Section 2.3.1). All sections should be labeled in the source code; that is, use "\label{}" with a selected key term. You might have referred to "the previous section" or "the final section" in your text. The copyeditors/typesetters may, however, want to set a link to those sections to facilitate the online edition. It helps to have labels already keyed to these sections.

3.1 Acknowledgments The *Journal* places acknowledgments in a special section at the end of the article following the References section. It is an environment \begin{acks}...\end{acks} and may contain any thanks you want to extend to individuals. It is also the place to include information about grants and research data. Whereas we don't use first names in the text of our articles, you may use full names here to thank people or to cite personal conversations that were used in the paper. This environment is the last code in the LATEX file before the \end{document}.

3.2 Endnotes The *NDJFL* uses endnotes² rather than footnotes.³ There is nothing special you need to do because your footnotes will automatically be placed in a section at the end of the article before the References section. You should just be aware of this placement in case you refer to the location by page or direction in the text of your article. Notes are also an appropriate place to cite personal conversations and thus full names of individuals can be used.

M. Kummerer and P. Cholak

Most of the time the note number should follow any punctuation, including closing quotation marks and closing parenthesis. The exceptions are that it should precede an em dash, and it *may* precede a closing parenthesis if the endnote applies to something in the parenthetical note.

4 Style Issues

The *NDJFL* follows the *CMS* for most style and grammatical issues. The *Journal* also uses American English for publication so spellings and capitalization will be changed to reflect this style. For copyediting issues we refer to *Butcher's Copyediting* [2]. Some of the other styles issues that you should address, so they need not be changed in your manuscript during copyediting, follow.

4.1 Boldface We try to avoid the heaviness of excessive boldface, and thus we limit its use to titles and headings. Instead of boldface for emphasizing text, any of the italic commands should be used. For the same reasoning, we prefer any of the enumerated list labels—that is, (i), (ii) or 1., 2. or (a), (b)—instead of bullets. If enumeration is not appropriate, a leading hyphen is still preferable to a black dot.

4.2 Dashes There are three types of dashes and each has a specific use. The hyphen (-), of course, is used to hyphenate words when compound words are formed. The *Journal* does not use hyphens or make open compounds with the most common prefixes, that is, *anti, co, counter, hyper, meta, mid, multi, neo, non, pro, pseudo, re, sub, super*. See the *Chicago Manual of Style* [5], particularly, Chapter 7, "Spelling, Distinctive Treatment of Words, and Compounds" for an extensive list and explanation of compounds and hyphenation.

The en dash (formed with two dashes --) is used as an ellipsis would be used to indicate a range or missing elements between the two ends. Thus, it is used between page numbers (pp. 67–74) and dates 1969–1973. No space is added to either side of the en dash.

The em dash (formed with three dashes ---) is used just as a pair of commas or parentheses would be used, that is, to offset text. No space—not even a tiny $\,$ —is left on either side of the em dash.

4.3 Latin phrases Our style does not italicize Latin phrases that are in general use and easily understood by the general reader of logic. The phrases prima facie, ad hoc, a priori, et al., and per se, for example, are not italicized. Phrases not in common usage and also other foreign language phrases should be italicized.

4.4 Latin abbreviations The Latin terms "i.e" (id est, that is), "e.g." (exempli gratia, for example), and "viz." (videlicit or videre licet; namely, that is to say, as follows) are handled in specific ways in *NDJFL* manuscripts. When used in the main text, their English equivalents should be used and thus are spelled out. The terms are offset by commas if the phrase following the term is not an independent clause. If the term is used with two independent clauses, "that is" is preceded by a semicolon and followed by a comma.

In *NDJFL* manuscripts, the Latin abbreviations should be confined to parenthetical uses or notes and are always followed by a comma. However, if the parenthetical note is a complete sentence and the term is used at the beginning, it should be spelled out. (For example, in this parenthetical explanation, "E.g." is not used.)

NDJFL Style Guide

Punctuation of Latin abbreviations and English equivalents

- The day went as expected; that is, the sun rose and the sun set.
- The day went as expected, that is, with the sun rising and setting.
- The day went as expected (i.e., the sun rising and setting).
- The day went as expected. (That is, the sun rose and the sun set.)

The abbreviation etc. (et cetera, and others of the same kind) is preceded and followed by a comma when it is the final item in a series. The equivalents "and so forth" and "and so on" are punctuated in the same way. Of course, if etc. ends a sentence, it would not be followed by any other punctuation. We prefer that you avoid the abbreviation in the text, or at least overusing it, though the term is acceptable in lists and tables, in notes, and within parentheses.

4.5 Ties Most users of LATEX know that a lowercase letter followed by a period needs a space modifier to prevent TEX from treating it as the end of a sentence and allowing more space. Mostly, the backslash \ is used to create this spacing. In some instances, however, the tilde is more appropriate because it will tie the two elements together so they cannot be separated at the end of a line. Thus, it is a good habit always to use p.~ to tie page numbers to their label and cf.~\cite{} so the citation number doesn't drop down to a new line. In addition, it is always a good idea to tie \cite and \ref to their labels or the previous word (e.g., Lemma~\ref{}). LATEX does a pretty good, but not perfect, job on this.

4.6 Serial commas When items in a series are separated by commas, with a conjunction joining the last two elements, the *Journal* uses a comma before the conjunction. See *CMS* [5, Chapter 6.18].

Examples of serial comma use

- "on a construction due to Bishop, Metakides, Nerode, and Shore [14]..." [4]
- "a nonreductionist conception of logicism, a deflationary view of abstraction, and an approach to formal arithmetic..." [1]
- "There are thus generators $g_{n_1}, g_{n_2}, g_{m_1}$, and g_{m_2} ..." [3]
- "Then we also have $k_2 = n_1$, $\sigma_1 = \tau_2$, and $\sigma_2 = \tau_1$." [3]

4.7 Labeling and cross-referencing Please label and key all sections, equations, and figures as well as all theorems, lemmas, definitions, corollaries, and so forth, for possible referencing. When your article becomes part of our online issue at Project Euclid, readers will appreciate the convenience of following your paper with easy links.

5 Graphics and Tables

The best graphics, *if* they can be created for your paper, are with LATEX's picture environment. This is because we can incorporate our fonts in the figure and also because it "travels" well. We realize, though, that this is a limited option. Therefore, the next best choice for a reliable graphic is \usepackage{graphicx} with a PDF file of the graphic for \includegraphics{}. This prints sharply and seamlessly and allows a scaling option for sizing your graphic to the optimal proportion for the *NDJFL* page.

M. Kummerer and P. Cholak

When creating tables keep in mind the size of your table in relation to a journalsized page. Large tables must often be scaled to fit a journal page. When this is done, the font size may be reduced to a point where the symbol is difficult to read or all the symbols and text are so close together that they are not distinct.

6 The AMS Packages

The style file ndjflart.cls loads amsmath, amsthm, and amssymb. With amsthm the standard environments, theorem, proof, lemma, corollary, lemma, and so on, are available. \begin{theorem}...\end{theorem} (and likewise for the others listed) will typeset your environments in the proper font and spacing. The \begin{proof}...\end{proof} will place "Proof" at the left margin in proper font and spacing, then list the text of the proof and conclude with our proof-ending symbol \Box at the right margin. The command \noeop ends a proof environment without a \Box when necessary. If intermediate proof-ending symbols are needed (proofs within a proof), the δshv (\dashv) should be used.

Definition 6.1 This is a theorem.

Proof Here is the proof.

7 References

Check the References section at the end of this paper for the format of our references. We use "works cited" as our basis so each item listed in your bibliography should be cited somewhere in the manuscript. The best way to create a bib file that will work with jflnat.bst and produce our style of reference page is to enlist the help of MathSciNet or Zentralblatt MATH. Use the BibTEX listing from your search at either site. Go to the alternate site to capture its number so that you have included both MRNUMBER and ZBLNUMBER. Then, with \bibliographystyle{jflnat}, you can create a complete set of citations that will greatly speed up the typesetting process.

Keep in mind that web page citations may not be useful in the long life of your paper. If you do use them, put the web address in the reference material and not in the text of the paper nor in endnotes. We prefer using \href rather than \url.

8 White Space

NDJFL uses a block style and eliminates as much white space as possible. Limiting white space helps in the overall appearance of your pages if they are published. Avoid using \bigskip and \vspace and scattering \,s all through your formulas. Trust LATEX and the style file you are using. The spacing will change when the paper is typeset with *NDJFL*'s fonts, so there is little need to fix the spacing except in the final version.

Notes

- 1. MathTime[™] Professional 2 (MTPro2) fonts are the product of Personal TeX, Inc., San Francisco, CA and trademarked by them.
- 2. This is an endnote.

NDJFL Style Guide

3. This is another.

References

- Antonelli, G. A., "Numerical abstraction via the Frege quantifier," *Notre Dame Journal of Formal Logic*, vol. 51 (2010), pp. 161–179. Zbl 1205.03055. MR 2667904.
- [2] Butcher, J., Butcher's Copyediting: The Cambridge Handbook for Editors, Copyeditors and Proofreaders, 4th edition, Cambridge University Press, Cambridge, 1981. 4
- [3] Clemens, J. D., "Isomorphism of homogeneous structures," Notre Dame Journal of Formal Logic, vol. 50 (2009), pp. 1–22. Zbl 1188.03031. MR 2536697. 5
- Gherardi, G., and A. Marcone, "How incomputable is the separable Hahn-Banach theorem?" Notre Dame Journal of Formal Logic, vol. 50 (2009), pp. 393–425. Zbl 1223.03052. MR 2598871. 5
- [5] University of Chicago Press Staff, editors, *The Chicago Manual of Style*, 16th edition, The University of Chicago Press, Chicago, 2010. 2, 4, 5

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