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Formatting Instructions for INFORMS Author Styles, 2016/02/22

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The abstract is limited to one paragraph and should contain no references and no equations. Following the abstract, please enter the following items (depending on the requirements of the particular INFORMS journal): (1) key words (`KEYWORDS`), (2) MSC subject classification identifying primary and secondary codes (see http://www.ams.org/msc) (`MSCCLASS`), (3) OR/MS classification, also identifying primary and secondary (see http://or.pubs.informs.org/Media/ORSubject.pdf) (`ORMSCCLASS`), (4) subject classifications (`SUBJECTCLASS`), and (5) area of review (`AREAOFREVIEW`). In later stages of manuscript processing, the history line (`HISTORY`) will be added.

Key words: INFORMS journals; LaTeX styles; author templates; instructions to authors

1. Templates and LaTeX Style

INFORMS currently publishes 11 print journals and three more that are online only (print on demand available). This document gives a brief description of the LaTeX author style `informs3.cls`. A LaTeX template is provided for each of the journals, giving further guidance on the order and format of entering information, particularly article metadata. For every journal there is a mandatory option when invoking the style, which consists of the official abbreviation of the journal. This option will load particular details not necessarily shared by all journals. For example,

```
\documentclass[mnsc]{informs3}
```

Following is a list of all INFORMS journal abbreviations.

```
deca   Decision Analysis
ijoc   INFORMS Journal on Computing
inte   Interfaces
isre   Information Systems Research
ited   INFORMS Transactions on Education
mnsc   Management Science
mksc   Marketing Science
moor   Mathematics of Operations Research
msom   Manufacturing & Service Operations Management
opre   Operations Research
orsc   Organization Science
serv   Service Science
stsc   Strategy Science
trsc   Transportation Science
```

Other important options that should be combined with the journal abbreviation are `blindrev` and `nonblindrev`. Options `blindrev` and `nonblindrev` are to be used when preparing a LaTeX-keyed mansucript for review. For blind review journals, option `blindrev` hides authors' names, the history line, and acknowledgments (and visibly announces that fact). In both `blindrev` and `nonblindrev` cases, the printout clearly indicates that the manuscript is submitted to "X" journal; the message is repeated in all running heads to avoid the possibly incorrect impression that the article is already accepted for publication.

The line spread in the manuscript differs from journal to journal to accommodate various editorial requirements. Follow the template (do not edit the LaTeX preamble!) and instructions on the covers of the respective journal. Standard LaTeX penalties that prevent inappropriate page breaks are also removed. For tables no spread is applied because a larger table, as one solid piece, could extend past the bottom edge of the page.

Templates are provided one per journal to reflect particular relevant details not shared by all INFORMS journals. For journals that allow electronic companions (ECs) (*Management Science*, *Operations Research*), additional instructions can be found in the template of respective journals.

2. LaTeX Packages/Tools Available

The `informs3.cls` house style will automatically load `amsmath`, `amssymb`, `ifthen`, `url`, `graphicx`, `array`, and `theorem` styles/tools. Package `dcolumn` is also loaded to help align numbers in tables on decimals. Please refer to respective LaTeX documentation sources for further explanation of how these packages work. By loading `amsmath`, the whole range of enhanced math typesetting commands is available in addition to the standard LaTeX constructions. Art (figures) should be included by using the syntax of the standard `graphicx` package.

For reference processing, we use `natbib` because of its versatility to handle the author-year system used by all INFORMS journals except `moor`. Of course, it handles the numeric style used by `moor` equally well. For handling internal (and external) links, an option to use the `hyperref` package is offered within templates. `natbib` and `hyperref` are loaded and configured only in individual journal templates due to the high sensitivity of the order of their actions (they redefine many internal LaTeX commands).

3. Author and Title Information

Please enter author and title information per template. Besides the obvious `TITLE`, there are `RUNAUTHOR` and `RUNTITLE`—shortened versions to be used in running heads (page headers).

In the general case of multiple authors, the style provides a block `ARTICLEAUTHORS`, used as

```
\ARTICLEAUTHORS{%
\AUTHOR{<first author or first group of authors sharing the same affiliation}
\AFF{<first affiliation>,
  \EMAIL{<email of the first author>}}
\AUTHOR{<second author or second group sharing the same affiliation}
\AFF{<second affiliation>,
  \EMAIL{<email of the first person in the group>},
  \EMAIL{<email of the second person in the group>},
  ...}
...}
```

Enter all authors names. If `hyperref` is used, the syntax for URLs and e-mail addresses should be

```
\href{http://www.informs.org}{INFORMS}
\href{mailto:pubtech@informs.org}{pubtech@informs.org}
```

where the second argument is printable/visible, while the first one indicates the action browser will perform if pointed to the visible part of the hyperlink. For details, please see the `hyperref` manual.

4. Internal Links

To use the full potential of LaTeX and enable smooth revisions and updates of the article and its references, all heads and subheads (`section`, `subsection`, `subsubsection`), equations that will be referenced (not all equations!), theorem-like environments, and especially citations (references) should be input properly, using symbolic links via `\label{}`, `\ref{}`, and `\cite{}` (and similar commands). This is important regardless of whether you use `hyperref`.

5. Mathematical Formulas

Please see LaTeX documentation. We will only point out some details not regularly available or often overlooked by LaTeX users.

5.1. Special Characters

To help prevent incorrect coding for calligraphic and openface (blackboard bold) letters, this style automatically loads `amsmath` and `amssymb`, so $\mathbb{R}$ and $\mathbb{N}$ are available and coded, respectively, `$\mathbb{R}$` and `$\mathbb{N}$`. Standard calligraphic letters like $\mathcal{A}$, $\mathcal{D}$, $\mathcal{U}$, and $\mathcal{X}$ should be coded as `$\mathcal{A}$`, `$\mathcal{D}$`, `$\mathcal{U}$`, and `$\mathcal{X}$`. With standard fonts, only uppercase letters are available in both cases.

5.2. Bold Mathematical Symbols

Following the style guidelines of the American Mathematical Society, INFORMS does not set math in bold, even if the environment is bold (as for example a section title). However, bold symbols (roman and greek letters, and occasionally digits) are in wide use for variety of reasons. We added macros to facilitate their use in regular math without resorting to overarching packages like `\bm` or using the clumsy `\mbox{\boldmath$$}` construction.

This style provides the following sequence of bold symbols: $\mathbf{A}$ to $\mathbf{Z}$; $\mathbf{a}$ to $\mathbf{z}$; $\mathbf{0}$, $\mathbf{1}$, to $\mathbf{9}$; $\boldsymbol{\alpha}$ to $\boldsymbol{\Omega}$; $\boldsymbol{\mathcal{A}}$ to $\boldsymbol{\mathcal{Z}}$; as well as symbols $\boldsymbol{\imath}$, $\boldsymbol{\jmath}$, $\boldsymbol{\ell}$, $\boldsymbol{\wp}$, and $\boldsymbol{\nabla}$. This list is keyed as

```
$\BFA$ to $\BFZ$; $\BFa$ to $\BFz$; $\BFzero$, $\BFone$, to $\BFnine$;
$\BFalpha$ to $\BFOmega$; $\BFcalA$ to $\BFcalZ$; as well as symbols
$\BFimath$, $\BFjmath$, $\BFell$, $\BFwp$, and $\BFnabla$.
```

5.3. Equation Counter

Whenever possible, equation numbering should be consecutive through the article (1, 2, . . .). This setting is achieved by outcommenting the command

```
\EquationNumbersThrough
```

in the journal template. If the complexity of the article really requires it, equation numbering can be done by section. The template line

```
%\EquationNumbersBySection
```

should be outcommented in this case. Whichever equation numbering system you choose, please number only the equations that will be referenced. Supply those equations with labels so that the referencing can be done by `\ref{}` in the standard LaTeX process. Should you use `eqnarray`, make sure that the last line does *not* end with `\\`, because that will set another blank line with an equation number assigned to a formula that does not exist, and the numbering will go awry.

5.4. Some Other Math Details

We mention a couple of random but useful points.

• For more convenient setting of matrices and matrix-like structures we supplied four environments that fine-tune math spacing around large delimiters. These are `Matrix`, `vMatrix`, `bMatrix`, and `pMatrix`. For example, the Vandermonde determinant can be set as

$$\begin{vmatrix} 1 & 1 & \dots & 1 \\ x_1 & x_2 & \dots & x_n \\ \vdots & \vdots & \ddots & \vdots \\ x_1^{n-1} & x_2^{n-1} & \dots & x_n^{n-1} \end{vmatrix}$$

by using the code

```
\begin{vMatrix}{cccc}1&1&\hdots&1\\ x_1&x_2&\hdots&x_n\\
\vdots&\vdots&\ddots&\vdots\\ x_1^{n-1}& x_2^{n-1}&\hdots&x_n^{n-1}\end{vMatrix}
```

The delimiters in the four constructs are, respectively, none, vertical bars, brackets, and parentheses (no prefix, `v`, `b`, and `p`).

• Besides the usual math operators like `\sin`, `\max`, etc., we introduced `\argmin` and `\argmax` to achieve the proper spacing and position of their limits in the display—centered under the whole operator, not only under "max" or "min."

• In math display constructions where the ubiquituous `array` is used, its elements are set in `\textstyle`. Most notably, fractions will be set small and lines will appear cramped. Limits that are supposed to go under operators will appear as subscripts. It is a matter of good mathematical exposition, rather than of any rigid rules, that the `\displaystyle` be used when a formula is considered too small and tight. To save keystrokes in such cases, we supplied `\DS`, `\TS`, and `\mcr`, for, respectively, `\displaystyle`, `\textstyle`, and the code that should end any line instead of `\\` to allow more generous spacing. Compare

$$\begin{bmatrix} 1 & \frac{1}{a^2+b^2} \\ \frac{1}{c^2+d^2} & \frac{1}{a^2+b^2}\frac{1}{c^2+d^2} \end{bmatrix}, \quad \begin{bmatrix} 1 & \dfrac{1}{a^2+b^2} \\ \dfrac{1}{c^2+d^2} & \dfrac{1}{a^2+b^2}\dfrac{1}{c^2+d^2} \end{bmatrix}, \quad \text{and} \quad \begin{bmatrix} 1 & \dfrac{1}{a^2+b^2} \\ \dfrac{1}{c^2+d^2} & \dfrac{1}{a^2+b^2}\dfrac{1}{c^2+d^2} \end{bmatrix}.$$

In the middle, the `bMatrix` end of line is keyed as the standard `\\`, instead of the enhanced `\mcr` that is used in the last matrix.

6. Lists

INFORMS has a special style for lists to accommodate journal column width. Typically lists are set as standard paragraphs, starting with the identifier (number, bullet, etc.). To reflect this in an automated way, we turned the standard settings for LaTeX lists "upside down."

The style supplies `enumerate`, `itemize`, and description lists `descr` in the above-mentioned paragraph style, whereas the standard hanging lists, if absolutely necessary, can be entered using list environments with names that are tentatively preceded by "`h`" (for "hang"): `henumerate`, `hitemize`, and `hdescr`. From time to time, our authors use a bulleted list within a numbered list. To get proper settings for this—`itemize` within `enumerate`—we also introduced an `enumitemize` list.

Following is a sample of `enumerate` based on text that appears on the inside cover of *Marketing Science*. In the first item there is also an `enumitemize` sublist to illustrate its use.

1. Although our primary focus is on articles that answer important research questions in marketing using mathematical modeling, we also consider publishing many other different types of manuscripts. These manuscripts include

• empirical papers reporting significant findings (but without any specific contribution to modeling),

• papers describing applications (emphasizing implementation issues), and

• scholarly papers reporting developments (in fundamental disciplines) of interest to marketing.

2. Manuscripts should report the results of studies that make significant contributions. Contributions can include significant substantive findings, improvements in modeling methods, meaningful theoretical developments, important methodological advances, tests of existing theories, comparisons of methods and empirical investigations.

3. *Marketing Science* promises to provide constructive, fair, and timely reviews with the goal of identifying the best submissions for ultimate publication in the Journal.

Compare it to `henumerate` (the bulleted list from the previous example is run into the first item here):

1. Although our primary focus is on articles that answer important research questions in marketing using mathematical modeling, we also consider publishing many other different types of manuscripts. These manuscripts include empirical papers reporting significant findings (but without any specific contribution to modeling), papers describing applications (emphasizing implementation issues), and scholarly papers reporting developments (in fundamental disciplines) of interest to marketing.
2. Manuscripts should report the results of studies that make significant contributions. Contributions can include significant substantive findings, improvements in modeling methods, meaningful theoretical developments, important methodological advances, tests of existing theories, comparisons of methods and empirical investigations.
3. *Marketing Science* promises to provide constructive, fair, and timely reviews with the goal of identifying the best submissions for ultimate publication in the Journal.

Following is the same text formatted as a bulleted list per INFORMS style.

• Although our primary focus is on articles that answer important research questions in marketing using mathematical modeling, we also consider publishing many other different types of manuscripts. These manuscripts include empirical papers reporting significant findings (but without any specific contribution to modeling), papers describing applications (emphasizing implementation issues), and scholarly papers reporting developments (in fundamental disciplines) of interest to marketing.

• Manuscripts should report the results of studies that make significant contributions. Contributions can include significant substantive findings, improvements in modeling methods, meaningful theoretical developments, important methodological advances, tests of existing theories, comparisons of methods and empirical investigations.

• *Marketing Science* promises to provide constructive, fair, and timely reviews with the goal of identifying the best submissions for ultimate publication in the Journal.

Description list (as in glossaries, for example) will be set per this sample.

Originality: By submitting any manuscript, the author certifies that the manuscript is not copyrighted and is not currently under review for any journal or conference proceedings. If the manuscript (or any part of it) has appeared, or will appear, in another publication of any kind, all details must be provided to the editor in chief at the time of submission...

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Subscription Services: *Marketing Science* (ISSN 0732-2399) is a quarterly journal published by the Institute for Operations Research and the Management Sciences at 7240 Parkway Drive, Suite 310, Hanover, MD 21076.

7. Theorems and Theorem-Like Environments

Theorems and other theorem-like environments come in two main styles. Theorems, lemmas, propositions, and corollaries are traditionally set in italic type, and environments like examples and remarks are set in roman.

To achieve automated distinction between these two main theorem styles (and substyles that are, to some extent, journal dependent), we defined several new theorem styles, most notably `TH` and `EX`. INFORMS house style prefers that all theorems (say) are numbered consecutively throughout. However, for longer papers with a more complex structure, numbering by section is also provided. The choice must be made in the template, because various counters defined in this way need to be declared *after* `hyperref`.

The preferred version, `\TheoremsNumberedThrough`, is shown here

```
\def\TheoremsNumberedThrough{%
\theoremstyle{TH}%
\newtheorem{theorem}{Theorem}
\newtheorem{lemma}{Lemma}
\newtheorem{proposition}{Proposition}
\newtheorem{corollary}{Corollary}
\newtheorem{claim}{Claim}
\newtheorem{conjecture}{Conjecture}
\newtheorem{hypothesis}{Hypothesis}
\newtheorem{assumption}{Assumption}
\theoremstyle{EX}
\newtheorem{remark}{Remark}
\newtheorem{example}{Example}
\newtheorem{problem}{Problem}
\newtheorem{definition}{Definition}
\newtheorem{question}{Question}
\newtheorem{answer}{Answer}
\newtheorem{exercise}{Exercise}
}
```

The other, two-tier numbering scheme, is defined via

```
\def\TheoremsNumberedBySection{%
\theoremstyle{TH}%
\newtheorem{theorem}{Theorem}[section]
\newtheorem{lemma}{Lemma}[section]
\newtheorem{proposition}{Proposition}[section]
\newtheorem{corollary}{Corollary}[section]
\newtheorem{claim}{Claim}[section]
\newtheorem{conjecture}{Conjecture}[section]
\newtheorem{hypothesis}{Hypothesis}[section]
\newtheorem{assumption}{Assumption}[section]
\theoremstyle{EX}
\newtheorem{remark}{Remark}[section]
```

```
\newtheorem{example}{Example}[section]
\newtheorem{problem}{Problem}[section]
\newtheorem{definition}{Definition}[section]
\newtheorem{question}{Question}[section]
\newtheorem{answer}{Answer}[section]
\newtheorem{exercise}{Exercise}[section]
}
```

Changing these numbering patterns by setting several different enunciations on the same counter is strongly discouraged. The house style does not allow Theorem 1 to be followed by Lemma 2 and then by Corollary 3.

For those who require an exception to the rule, there are theorem styles `THkey` and `EXkey`. These follow the general style of `TH` and `EX` but if used with an optional argument, allow for keying any text as a theorem title—numbering and embellishments are taken away in this case. For example,

```
{\theoremstyle{THkey}\newtheorem{mytheorem}{XXXXX}}
```

should be used *only* with the optional argument to get something like

MY DEAREST MOST IMPORTANT THEOREM. $a = a$.

by keying

```
\begin{mytheorem}[My Dearest Most Important Theorem.]$a=a$.
\end{mytheorem}
```

For proofs, there is `\proof{<proof name>}` ... `\endproof`. Here `<proof name>` may be "`Proof.`", or for example, "`Proof of Theorem \label{mytheor1}.`" In general, the end of proof should be marked with the open box, aka `\Halmos` (□). The proof can end after a normal sentence or after displayed math. `\Halmos` should be entered manually (or not at all for the non-QED-oriented authors).

8. Footnotes and Endnotes

Use of footnotes varies among the INFORMS journals. Most journals allow regular footnotes. However, `inte` does not allow footnotes, whereas `opre` and `orsc` use endnotes instead of footnotes. Details of how to use endnotes are explained in the comments of the respective journals; template files. In the `opre` and `orsc` cases, package `endnotes.sty` is invoked to automatically do the job.

9. Figures and Tables

`graphicx` package should be used for inclusion of graphic files (it is automatically loaded). Please see LaTeX documentation for details.

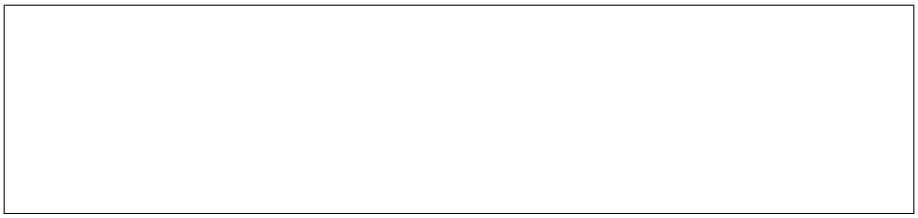
Here we will concentrate on our macros for handling the whole trio: caption, figure (art file), and figure note, as well as the counterpart trio for tables. To enable proper style, all elements have to be captured at once, so that the macro can analyze components for presence or absence of the caption text, for presence or absence of a note, as well as for the tentative size of a figure or a table, etc.

9.1. Figures

A typical setting for figures is

```
\begin{figure}
\FIGURE
{\includegraphics{figure-filename.pdf}}
```

Figure 1 Text of the Figure Caption



Note. Text of the notes.

```
{Text of the Figure Caption.\label{fig1}}
{Text of the notes.}
\end{figure}
```

The result may look as shown in Figure 1 (just a rectangle to simplify this document). The typographical style and position of the caption (above or below the figure) will be automatically set depending on the selected journal option. To summarize, within `\FIGURE`, the order of entries is *art—caption (with label)—notes*. Even if notes are not included, the third argument to `\FIGURE` must be present as an empty group `{}`, otherwise a syntax error will occur.

Regarding the figure itself ("art"), the preferred formats are PDF or EPS, whenever they can guarantee the vector format (drawing, not image). A common problem is caused by transferring graphs in MS Office products via the clipboard. In many cases the transfer creates a bitmap/image instead of the original vector-based graph, which typically degrades the quality of art to an unacceptably low level. Such images are also (almost) ineditable.

If the art is a real image (photograph), JPEG and TIFF file formats are the way to go. JPEG should be used with best quality in mind, not with the smallest file size. The latter typically renders it useless for publishing. TIFF is not "lossy," so it is preferred in such cases. Make sure the resolution is high enough: For photographs, resolution should be at least 300 dpi in both black and white and color cases. If there is a need to reproduce a piece of line art from an old source, where an electronic file is not available and the only option is to scan, resolution should not be lower than 900 dpi.

9.2. Tables

For inclusion of tables, a typical setting is

```
\begin{table}
\TABLE
{Text of the Table Caption.\label{tab1}}
{\begin{tabular}{<table format>}
 entries
 \end{tabular}}
{Text of the notes.}
\end{table}
```

The order of entries in `\TABLE` is *caption (with label)—table body—notes*, because the table caption is always set above the table body. Within the table, INFORMS house style requires only three rules: above the table column heads, between the table column heads and the table body, and after the table body. Of course, straddle rules are acceptable if necessary (the "`\cline{3--5}` stuff"). In extreme cases, a table may be so complex that it needs to be set as a piece of artwork, in which case, a properly formatted vector-based figure may be included instead of a keyed table.

To enhance the appearance of tables regarding vertical spacing, macros `\up` and `\down` should be used. `\up` should be used in rows following a rule (increasing the space below the rule). `\down`

should be used in rows before a rule (increasing the space before the rule). The following LaTeX detail shows how to use `\up` and `\down`.

```
\hline
\up\down System & Benchmark\\
\hline
\up First entry...\\
...
\down Last row\\
\hline
```

9.3. Rotated Figures and Tables

In cases where a figure, or more often a table, is so large that it cannot reasonably fit in the portrait position, landscape setting is also available. The whole environment (`figure` or `table`) should be surrounded by

```
\begin{rotate}
<table or figure>
\end{rotate}
```

Before resorting to this extreme measure, please try smaller type size for the table body or even some reworking/restructuring to make it fit.

10. About Appendices

There are a variety of ways authors set their appendices. We tried to standardize those options to make them work well with the internal linking system. Two basic styles are available.

1. Appendix started by a general title "Appendix," possibly followed by two or more sections. It should be keyed as

```
\begin{APPENDIX}{}
...
\end{APPENDIX}
```

Subsections and subsubsections are also allowed. There are two subtypes of such an appendix.

- If the empty braces after `{APPENDIX}` are left empty, the title of the whole section will be "Appendix."
- If a specific title is entered, say "Proofs of Lemmas and Theorems," the appendix title will appear as "Appendix. Proofs of Lemmas and Theorems."

```
\begin{APPENDIX}{Proofs of Lemmas and Theorems}
```

will start that appendix type.

2. When you have two or more appendices that should logically be independent, we provide the environment `APPENDICES`:

```
\begin{APPENDICES}
...
\end{APPENDICES}
```

This environment has no arguments. It is supposed to have at least two sections. Their titles will be set as "Appendix A. `<Title of Appendix A>`," "Appendix B. `<Title of Appendix B>`," etc. Subsections and subsubsections are also allowed.

The type size and relative position of the appendix with respect to the acknowledgments is regulated by the style of the particular journal and reflected in the journal template.

11. Citations and References

INFORMS journals use the author-year style of references, with the exception of `moor` that uses the numeric style. In addition to the text here, a comprehensive (mixed) sample of references is added to this main text.

To set references in the INFORMS house style, it is best to use BibTeX coupled with our `.bst` (BibTeX) style `informs2014.bst` (`informs2014trsc.bst` in the case of *Transportation Science*). For example, if your file is named `mypaper.tex` and your BibTeX database is `myrefs.bib`, enter

```
\bibliographystyle{informs2014}
\bibliography{myrefs}
```

in the place where references should be set. After the first LaTeX run, apply BibTeX

```
bibtex mypaper
```

That will produce the `mypaper.bbl` file, as well as the `mypaper.blg` log file. Please read the `mypaper.blg` text file to make sure your database is not missing a required field. Please keep and submit the `.bbl file` along with your `.bib` file. Even with best care, the database may have some inconsistencies, typos, and inadequate journal abbreviations to adhere to the INFORMS style. The BibTeX style cannot automatically rectify such problems, so we need your `.bbl` as an editable file for those minor corrections.

11.1. Author-Year Style Labels

In case you do not use BibTeX, your references are keyed (manually) in the style found in INFORMS journals. Journal templates set the `natbib` configuration (in the preamble) to reflect the particular journal style. To have `\cite{}` work properly also for the manually keyed references, you should follow the proper syntax as explained in the following example.

Consider the following five `\bibitem` lines.

```
\bibitem[{Psaraftis(1988)}]{Psaraftis:1998}
\bibitem[{Psaraftis(1995)}]{Psaraftis:1995}
\bibitem[{Regan et~al.(1998{\natexlab{a}})Regan, Mahmassani, and Jaillet}]{Regan:1998a}
\bibitem[{Regan et~al.(1998{\natexlab{b}})Regan, Mahmassani, and Jaillet}]{Regan:1998b}
\bibitem[{Rego and Roucairol(1995)}]{Rego}
```

Symbolic labels used in `\cite{}` entries is what is shown in the last set of braces: `Psaraftis:1998` through `Rego`. For `natbib` to access names and years separately, it is very important to strictly adhere to the syntax of the optional argument to `\bibitem` as shown. It is in the form `\bibitem[{string1}]`, where `string1` is composed as

```
<short-name>(year<possible-alpha-label>)<long-name>
```

Note that there are *no space* before and after `(` and `)`. The `<long-name>` part can be omitted in journal styles so that `string1` simplifies to

```
<short-name>(year<possible-alpha-label>)
```

The `<possible-alpha-label>` part is only used when the `<short-name>` and `year` are identical, in which case we append lowercase letters a, b, c, and so on. For a citation with one author, follow examples from lines 1 and 2. For citations with two authors, see the last line (Rego and Roucairol). Lines 3 and 4 show a sample where `<short-name>` and `year` are identical. Citations with three or more authors abbreviate into "first-author et al."

Note. In *Transportation Science* (`trsc`), the "first-author et al." rule applies to *four* authors or more; three-authors citations are set with their full last names. Hence, lines 3 and 4 should be altered (again, we need the `.bbl` file) to read

```
\bibitem[{Regan, Mahmassani, and Jaillet(1998{\natexlab{a}})}]{Regan:1998a}
\bibitem[{Regan, Mahmassani, and Jaillet(1998{\natexlab{b}})}]{Regan:1998b}
```

Details of usage for `\cite` are available from the `natbib` documentation. Following is a brief excerpt.

```
\citet{key}              ==>> Jones et al. (1990)
\citep{key}              ==>> (Jones et al., 1990)
\citep[chap. 2]{key}     ==>> (Jones et al., 1990, chap. 2)
\citep[e.g.][]{key}      ==>> (e.g. Jones et al., 1990)
\citep[e.g.][p. 32]{key} ==>> (e.g. Jones et al., p. 32)
\citeauthor{key}         ==>> Jones et al.
\citeyear{key}           ==>> 1990
\citealt{key}            ==>> Jones et al.\ 1990
\citealp{key}            ==>> Jones et al., 1990
\citealp{key,key2}       ==>> Jones et al., 1990; James et al., 1991
\citealp[p.~32]{key}     ==>> Jones et al., 1990, p.~32
\citetext{priv.\ comm.}  ==>> (priv.\ comm.)
```

11.2. Numeric Style Labels

The same five `\bibitem` lines

```
\bibitem[{Psaraftis(1988)}]{Psaraftis:1998}
\bibitem[{Psaraftis(1995)}]{Psaraftis:1995}
\bibitem[{Regan et~al.(1998{\natexlab{a}})Regan, Mahmassani, and Jaillet}]{Regan:1998a}
\bibitem[{Regan et~al.(1998{\natexlab{b}})Regan, Mahmassani, and Jaillet}]{Regan:1998b}
\bibitem[{Rego and Roucairol(1995)}]{Rego}
```

in the numeric style will be fine. The only change is the removal of the now unnecessary labels "a" and "b" (where applicable), because the reference counter is what will distinguish such cases. The above-described command `\cite` and its derivations `\citet`, `\citep`, etc. for `natbib` will behave differently in the numeric style. A brief overview follows.

```
\citet{jon90}               ==>> Jones et al. [21]
\citet[chap.~2]{jon90}      ==>> Jones et al. [21, chap.~2]
\citep{jon90}               ==>> [21]
\citep[chap.~2]{jon90}      ==>> [21, chap.~2]
\citep[see][]{jon90}        ==>> [see 21]
\citep[see][chap.~2]{jon90} ==>> [see 21, chap.~2]
\citep{jon90a,jon90b}       ==>> [21, 32]
```

Sample INFORMS References, 2016/02/23

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This is a compilation of references of several INFORMS articles to serve as a sample for those who do not use BiBTeX but key their references directly.

Keywords: INFORMS references; references style

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