

$\text{\LaTeX} 2_{\epsilon}$  Classes for the Journal of  
Machine Learning Research (JMLR) and  
Proceedings of Machine Learning  
Research (PMLR)

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# 1 Introduction

The `jmlr` class is for articles that need to be formatted according to the Journal of Machine Learning Research style. This class is based on the `jmlr2e` and `jmlrwcp2e` packages but has been adapted to enable it to work better with the `combine` class to collate the articles into a book. Section 2 describes how to use the `jmlr` class. Note that JMLR W&CP (JMLR: Workshop and Conference Proceedings) has been renamed PMLR (Proceedings of Machine Learning Research). Articles for new proceedings should use the `pmlr` class option.

The `jmlrbook` class is for combining articles that use the `jmlr` class into a book. The `jmlrbook` class uses `combine` and `hyperref`, which are troublesome enough on their own but together are quite fragile. The `jmlrbook` class redefines some internals to get `combine` and `hyperref` to work together but some packages (e.g. `subfig` and `pdfpages`) are likely to mess everything up and cause errors. This is why the guidelines to authors are fairly stringent and why the `jmlr` class will give an error message if certain packages are loaded.<sup>1</sup> The `jmlrbook` class works best with PDF $\LaTeX$  so authors should ensure that their articles can compile with PDF $\LaTeX$ . Section 3 describes how to use the `jmlrbook` class.

As from v1.24, some non-class dependent commands and environments have been moved to a new package `jmlrutils` (see Section 2.5). This package is automatically loaded by `jmlr`, but may be used with other classes. (Note that you will need to explicitly load `algorithm2e` if you want to use the `algorithm` environment.)

Note that the `jmlr` (and therefore `jmlrbook`) class automatically loads the `hyperref` package, but some packages need to be loaded before `hyperref`.

Anything that needs to be done before `hyperref` is loaded can be specified by defining the command

```
\jmlrprehyperref
```

before the class is loaded. For example, to load the packages `foo` and `bar` before `hyperref`, you can do:

```
\newcommand{\jmlrprehyperref}{\usepackage{foo,bar}}
\documentclass{jmlr}
```

There is a Java application called `makejmlrbookgui` that can compile all the individual papers from the book and generate the bib file for the proceedings (according to the PMLR specifications). It can also create a grey nonhyperlinked PDF/X compliant print version of

<sup>1</sup>Currently `jmlr` will check if `subfig`, `pdfpages`, `geometry`, `psfig`, `epsfig`, `theorem`, `tabularx`, `amsthm` and `ntheorem` are loaded and will throw an error. If other packages are found to be a problem, they will be added to the list.

the book. The application can be downloaded from <http://www.dickimaw-books.com/software/makejmlrbookgui/> where there is also a [troubleshooting section](#).

The Perl script `makejmlrbook` is now deprecated and will be removed in future releases. It has been superseded by `makejmlrbookgui`. Note that PMLR (formerly JMLR W&CP) has new format guidelines that are followed by new versions of `makejmlrbookgui` but not by the Perl script `makejmlrbook`, so that script is no longer documented or supported. The PMLR submission requirements for production editors are now much simpler and can be followed without the assistance of `jmlrbook` or `makejmlrbookgui`.

## 1.1 Required Packages

The `jmlr` class is based on the `article` class and loads the following packages: `jmlrutils` (see Section 2.5), `amsmath`, `amssymb`, `natbib`, `url`, `graphicx` and `algorithm2e`, `hyperref`, `nameref`, `xcolor` and `xkeyval`. Note that unlike the `jmlr2e` and `jmlrwcp2e` packages, this class file does not load the obsolete `epsfig` package.

The `jmlrbook` class additionally loads the `combine` class and the following packages: `combnat`, `setspace` and `fink`.

The `makejmlrbookgui` application requires Java and  $\text{\TeX}$ . (GhostScript is also required for the print-ready version of the book.)

## 2 Guidelines for Article Authors

Article authors should use the `jmlr` class. This class comes with example files `jmlr-sample.tex` and `jmlrwcp-sample.tex`, which can be used as templates.

The following class options are available:

**nowcp** The article is for the Journal of Machine Learning Research (default).

**pmlr** The article is for the Proceedings of Machine Learning Research (PMLR).

**wcp** The article is for JMLR Workshop and Conference Proceedings (JMLR W&CP).

**twocolumn** Use two-column style. The title and author information will span both columns through the use of the optional argument of `\twocolumn`. This means that no page break can occur in the title and author list.

**onecolumn** Use one-column style (default).

**color** Color version (see Section 2.6).

**gray** Grayscale version (see Section 2.6).

**tablecaption=top** in a table environment, `\floatconts` puts the caption at the top.

**tablecaption=bottom** in a table environment, `\floatconts` puts the caption at the bottom.

### 2.1 Title Information

The `jmlr` class uses different syntax from `jmlr2e` and `jmlrwcp2e` to specify the title information. In particular, it doesn't define `\jmlrheading` and `\ShortHeading`. Instead, the following commands should be used:

`\jmlrvolume`

```
\jmlrvolume{\number}
```

This specifies the volume number. For example:

```
\jmlrvolume{2}
```

`\jmlryear`

```
\jmlryear{\year}
```

This specifies the year. For example:

```
\jmlryear{2010}
```

`\jmlrsubmitted`

```
\jmlrsubmitted{<date>}
```

This specifies the submission date.

`\jmlrpublished`

```
\jmlrpublished{<date>}
```

This specifies the publication date.

`\jmlrworkshop`

```
\jmlrworkshop{<title>}
```

This specifies the workshop title (for use with the `wcp` class option).

The title information is specified using the commands described below. These commands should typically go in the preamble. As with most class files, The title itself is produced using

`\maketitle`

```
\maketitle
```

This command should go after `\begin{document}`. For example:

```
\begin{document}
\maketitle
```

Before `\maketitle`, you must specify the title information using the following commands:

`\title`

```
\title[<short title>]{<title>}
```

This specifies the article's title. A short title for the page header can be supplied via the optional argument *<short title>*. If you want to force a line break in the title, use

`\titlebreak`

```
\titlebreak
```

instead of `\newline` or `\\` as this will ensure that the line break doesn't also end up in the table of contents or bookmarks when the article is included in a book. If there is content within the title that should not appear in the page headings or table of contents (for example, a footnote) use

`\titletag`

```
\titletag{<title only stuff>}
```

For example:

```
\title{An Interesting Paper\titlebreak
With a Line Break\titletag{\thanks{and an
acknowledgement}}}
```

`\editor`

```
\editor{<name>}
```

This specifies the editor's name. If there is more than one editor, use:

`\editors` `\editors{<names>}`

`\author` `\author{<author specs>}`

This specifies the author. The specifications *<author specs>* are a bit different to `jmlr2e` and `jmlrwcp2e`. Use

`\Name` `\Name[<abbreviated name>]{<author's name>}`

to specify the author's name. Note that if the surname contains a space it must be grouped (enclosed in braces `{}`). Similarly if the initial letter of each forename is a diacritic it must be grouped. If the abbreviation of the name doesn't get parsed properly you can override the default using the optional argument. (See below for examples.)

If there is any content within *<author's name>* that shouldn't get copied to the header, footer or table of contents, it should be enclosed within the argument of

`\nametag` `\nametag{<title only stuff>}`

For example:

```
\Name{Ann Other\nametag{\thanks{formerly with some other
institute}}}
```

`\Email` `\Email{<author's email>}`

This specifies the author's email address. It should only be used within the argument to `\author`.

`\and` `\and`

This should be used to separate two authors with the same address.

`\AND` `\AND`

This should be used to separate authors with different addresses.

`\` `\`

This should be used before an author's address or between authors with the same address where there are more than two authors.

`\addr` `\addr`

This should be used at the start of the address.



**Example 1** Two authors with the same address:

```
\author{\Name{Jane Doe} \Email{abc@sample.com}\and
\Name{John {Basey Fisher}} \Email{xyz@sample.com}}\
\addr Address}
```

In this example, the second author has a space in his surname so the surname needs to be grouped.

**Example 2** Three authors with the same address:

```
\author{\Name{Fred Arnold {de la Cour}} \Email{an1@sample.com}}\
\Name{Jack Jones} \Email{an3@sample.com}}\
\Name{{\ 'E}louise {\ 'E}abhla Finchley} \Email{an2@sample.com}}\
\addr Address}
```

In this example, the third author has an accent on her forename initials so grouping is required.

**Example 3** Authors with a different address:

```
\author{\Name{John Smith} \Email{abc@sample.com}}\
\addr Address 1
\AND
\Name{May Brown} \Email{xyz@sample.com}}\
\addr Address 2
}
```

**Example 4** The author is actually a company so there's no first name and surname:

```
\author{\Name[Some Company, Ltd]{Some Company, Ltd}\Email{xyz:some.com}}\
\addr Address
}
```

## 2.2 Font Changing Commands

Use the  $\text{\LaTeX}2_{\epsilon}$  font changing commands, such as `\bfseries` or `\textbf{<text>}`, rather than the obsolete  $\text{\LaTeX}2.09$  commands, such as `\bf`. (The obsolete font changing commands will produce a warning if used.)

`\url`

```
\url{<address>}
```

This will typeset `<address>` in a typewriter font. Special characters, such as `~`, are correctly displayed. Example:

```
\url{http://theoval.cmp.uea.ac.uk/~nlct/}
```

This command is provided by the url package which is automatically loaded.

`\mailto` `\mailto{email address}`

This will typeset the given email address in a typewriter font. Note that this is not the same as `\Email`, which should only be used in the argument of `\author`. This command is provided by the supplementary package `jmlrutils`. Other commands are described in Section 2.5.

## 2.3 Structure

`abstract` `\begin{abstract}`  
`<text>`  
`\end{abstract}`

The abstract text should be displayed using the abstract environment.

`keywords` `\begin{keywords}<keyword list>\end{keywords}`

The keywords should be displayed using the keywords environment.

`\acks` `\acks{<text>}`

This displays the acknowledgements.

`\section` `\section{<title>}`

Section titles are created using `\section`. The heading is automatically numbered and can be cross-referenced using `\label` and `\ref`. Unnumbered sections can be produced using:

`\section*` `\section*{<title>}`

`\subsection` `\subsection{<title>}`

Sub-section titles are created using `\subsection`. Unnumbered sub-sections can be produced using:

`\subsection*` `\subsection*{<title>}`

`\subsubsection` `\subsubsection{<title>}`

Sub-sub-section titles are created using `\subsubsection`. Unnumbered sub-sub-sections can be produced using:

`\subsubsection*`

```
\subsubsection*{<title>}
```

Further sectioning levels can be obtained using `\paragraph` and `\subparagraph`, but these are unnumbered with running heads.

`\appendix`

```
\appendix
```

Use `\appendix` to switch to the appendices. This changes `\section` to produce an appendix. Example:

```
\appendix
\chapter{Proof of Theorems}
```

## 2.4 Citations and Bibliography

The `jmlr` class automatically loads `natbib` and sets the bibliography style to `plainnat`. References should be stored in a `.bib` file.

`\bibliography`

```
\bibliography{<bib file>}
```

This displays the bibliography.

`\citep`

```
\citep[<pre note>][<post note>]{<label>}
```

Use `\citep` for a parenthetical citation.

`\citet`

```
\citet[<note>]{<label>}
```

Use `\citet` for a textual citation.

See the `natbib` documentation<sup>1</sup> for further details.

## 2.5 `jmlrutils` supplementary package

The `jmlrutils` package is automatically loaded by the `jmlr` class but may be used with other classes.

### 2.5.1 Package Options

The following options may be passed to the `jmlrutils` package if it is to be used without the `jmlr` class.

**maths** Define the commands `\set` and `\oldvec` and redefine `\vec`. This will also automatically load the `amsmath` package. (Default.)

---

<sup>1</sup><http://ctan.org/pkg/natbib>

**nomaths** Don't define `\set` and `\oldvec` and don't redefine `\vec`.

**theorems** Define the theorem commands and environments listed in Section 2.5.5. (Default.)

**notheorems** Don't define the theorem commands and environments.

**subfloats** Define the sub-figure and sub-table commands listed in Section 2.5.2. (Default.)

**nosubfloats** Don't define the sub-figure and sub-table commands.

The non-default options are provided when `jmlrutils` is loaded without the `jmlr` class. Don't try passing the non-default options to `jmlrutils` if you are using the `jmlr` class as this could interfere with the build process for the proceedings or book.

The `jmlrutils` package doesn't recognise any of the `jmlr` class options (such as `tablecaption`).

## 2.5.2 Figures and Tables

Floats, such as figures, tables and algorithms, are moving objects and are supposed to float to the nearest convenient location. Please don't force them to go in a particular place. In general it's best to use the `htbp` specifier and don't put the float in the middle of a paragraph (that is, make sure there's a paragraph break above and below the float). Floats are supposed to have a little extra space above and below them to make them stand out from the rest of the text. This extra space is put in automatically and shouldn't need modifying.

To ensure consistency, please *don't* try changing the format of the caption by doing something like:

```
\caption{\textit{A Sample Caption.}}
```

or

```
\caption{\em A Sample Caption.}
```

You can, of course, change the font for individual words or phrases. For example:

```
\caption{A Sample Caption With Some \emph{Emphasized Words}.}
```

The `jmlrutils` package provides the following command for displaying the contents of a figure or table:

`\floatconts`

```
\floatconts{<label>}{<caption command>}{<contents>}
```

This ensures that the caption is correctly positioned and that the contents are centred. For example:

```
\begin{table}[htbp]
\floatconts
  {tab:example}% label
  {\caption{An Example Table}}% caption command
  {%
```

```

\begin{tabular}{ll}
\bfseries Dataset & \bfseries Result\\
Data1 & 0.123456
\end{tabular}
}
\end{table}

```

If the `jmlr` class is used, the table caption (when used with `\floatconts`) will obey the table-caption class option, otherwise it will be placed above the table contents. Within the figure environment, `\floatconts` will put the caption below the contents. This command may be used within other floats.

The `jmlr` class automatically loads `graphicx` which defines:

`\includegraphics`

```
\includegraphics[<options>]{<file name>}
```

where *<options>* is a comma-separated list of options. If you are using `jmlrutils` with another class you need to load `graphicx` in order to use this command. See the documentation for the `graphicx` package for further details of this command and other provided commands.

For example, suppose you have an image called `mypic.png` in a subdirectory called `images`:

```

\begin{figure}[htbp]
\floatconts
  {fig:example}% label
  {\caption{An Example Figure}}% caption command
  {\includegraphics[width=0.5\textwidth]{images/mypic}}
\end{figure}

```

Note that you shouldn't specify the file extension when including the image when using the `jmlr` class. It's helpful if you can also provide a grayscale version of colour images. This should be labelled as the colour image but with `-gray` immediately before the extension. (The extension need not be the same as that of the colour image.) For example, if you have an image called `mypic.pdf`, the grayscale can be called `mypic-gray.pdf`, `mypic-gray.png` or `mypic-gray.jpg`. See Section 2.6 for further details.

`\includeteximage`

```
\includeteximage[<options>]{<file name>}
```

If your image file is made up of  $\text{\LaTeX}$  code (e.g. `tikz` commands) the file can be included using `\includeteximage`. The optional argument is a key=value comma-separated list where the available keys are a subset of those provided by `graphicx`'s `\includegraphics`. The main keys are: `width`, `height`, `scale` and `angle`. Some of the keys specific to image files (such as the bounding box and type keys) do nothing with `\includeteximage`.

### Sub-Figures and Sub-Tables

The `subfig` package causes a problem for `jmlrbook` so the `jmlr` class will give an error if it is used. Therefore the `jmlr` class provides its own commands for including sub-figures and sub-

tables. If you aren't using the `jmlr` class, you can prevent `jmlrutils` from defining these commands with the `nosubfloats` package option.

`\subfigure` `\subfigure[<title>] [<valign>]{<contents>}`

This makes a sub-figure where *<contents>* denotes the contents of the sub-figure. This should also include the `\label`. The first optional argument *<title>* indicates a caption for the sub-figure. By default, the sub-figures are aligned at the base. This can be changed with the second optional argument *<valign>*, which may be one of: `t` (top), `c` (centred) or `b` (base).

For example, suppose there are two image files, `mypic1.png` and `mypic2.png`, in the sub-directory `images`. Then they can be included as sub-figures as follows:

```
\begin{figure}[htbp]
\floatconts
{fig:example2}% label for whole figure
{\caption{An Example Figure.}}% caption for whole figure
{%
  \subfigure{%
    \label{fig:pic1}% label for this sub-figure
    \includegraphics{images/mypic1}
  }\quad % space out the images a bit
  \subfigure{%
    \label{fig:pic2}% label for this sub-figure
    \includegraphics{images/mypic2}
  }
}
\end{figure}
```

`\subtable` `\subtable[<title>] [<valign>]{<contents>}`

This is an analogous command for sub-tables. The default value for *<valign>* is `t`.

### 2.5.3 Algorithms

The `jmlr` class automatically loads the `algorithm2e` package. If you are using `jmlrutils` with another class, you will need to load `algorithm2e` if you want to use the `algorithm` and `algorithm2e` environments described below.

`algorithm` `\begin{algorithm}[<placement>]`  
`<contents>`  
`\end{algorithm}`

Enumerated textual algorithms can be displayed using the `algorithm` environment. The optional argument is as for `figure` and `table`.

Within the body of the environment you can use the `enumerate` environment.

enumerate\*

```
\begin{enumerate*}
\item <text>
...
\end{enumerate*}
```

If you want to have nested enumerate environments but you want to keep the same numbering throughout the algorithm, you can use the `enumerate*` environment, provided by the `jmlrutils` package. For example:

```
\begin{algorithm}
\floatconts{alg:path}%label
{\caption{Shortest Path}}% caption
{% contents
\begin{enumerate*}
\item Set the label of vertex  $s$  to 0
\item Set  $i=0$ 
\begin{enumerate*}
\item \label{step:locate}Locate all unlabelled vertices
adjacent to a vertex labelled  $i$  and label them  $i+1$ 
\item If vertex  $t$  has been labelled,
\begin{enumerate*}
\item[] the shortest path can be found by backtracking, and
the length is given by the label of  $t$ .
\end{enumerate*}
\end{enumerate*}
otherwise
\begin{enumerate*}
\item[] increment  $i$  and return to step~\ref{step:locate}
\end{enumerate*}
\end{enumerate*}
\end{enumerate*}
}
```

algorithm2e

```
\begin{algorithm2e}
<contents>
\end{algorithm2e}
```

Pseudo code can be displayed using the `algorithm2e` environment, provided by the `algorithm2e` package, which is automatically loaded. For example:

```
\begin{algorithm2e}
\caption{Computing Net Activation}
\label{alg:net}
\DontPrintSemicolon
\LinesNumbered
\KwIn{ $x_1, \dots, x_n, w_1, \dots, w_n$ }
\KwOut{ $y$ , the net activation}
 $y \leftarrow 0$ ;
```

```

\For{$i\leftarrow 1$ \KwTo $n$}{
  $y \leftarrow y + w_i*x_i$;
}
\end{algorithm2e}

```

See the algorithm2e documentation<sup>2</sup> for more details.

## 2.5.4 Description Lists

altdescription

```

\begin{altdescription}{\langle widest label \rangle}
\item[\langle label \rangle] \langle item text \rangle
\end{altdescription}

```

In addition to the standard description environment, the jmlr class also provides the altdescription environment. This has an argument that should be the widest label used in the list. For example:

```

\begin{altdescription}{differentiate}
\item[add] A method that adds two variables.
\item[differentiate] A method that differentiates a function.
\end{altdescription}

```

## 2.5.5 Theorems, Lemmas etc

The jmlrbook class doesn't work well with common theorem packages, so jmlrutils provides theorem code that won't conflict with jmlrbook. If you're using jmlrutils without the jmlr class, you can prevent the definition of these commands with the notheorems package option.

The jmlrutils package provides the following theorem-like environments: theorem, example, lemma, proposition, remark, corollary, definition, conjecture and axiom. Within the body of those environments, you can use the proof environment to display the proof if need be. The theorem-like environments all take an optional argument, which gives the environment a title. For example:

```

\begin{theorem}[An Example Theorem]
\label{thm:example}
This is the theorem.
\begin{proof}
This is the proof.
\end{proof}
\end{theorem}

```

You can define your own numbered theorem-like environment using:

\newtheorem

```

\newtheorem{\langle name \rangle}[\langle counter \rangle]{\langle title \rangle}[\langle outer counter \rangle]

```

<sup>2</sup><http://ctan.org/pkg/algorithm2e>



or you can define an unnumbered theorem-like environment using:

```
\newtheorem*{\newtheorem*{<name>}{<title>}}
```

where *<name>* is the name of the new environment and *<title>* is the title tag at the start of the environment. In the case of the numbered theorems, *<counter>* is a predefined counter to use with this theorem. If omitted, a new counter called *<name>* will be defined. The final optional argument *<outer counter>* is the name of a parent counter which, when incremented, should reset the theorem counter.

Both `\newtheorem` and `\newtheorem*` set the new theorem's style to the current defined style. The current style is set using the following commands:

```
\theorembodyfont{\theorembodyfont{<declarations>}}
```

This sets the font declarations used in the body of the theorem. This defaults to `\itshape`.

```
\theoremheaderfont{\theoremheaderfont{<declarations>}}
```

This sets the font declarations used for the theorem title. This defaults to `\bfseries`.

```
\theorempostheader{\theorempostheader{<text>}}
```

This indicates what should occur at the end of the title. This defaults to nothing.

```
\theoremsep{\theoremsep{<text>}}
```

This indicates what to put between the header and the body of the environment. This defaults to nothing.

For example, to define an unnumbered theorem-like environment called “note” with the title “Note” followed by a colon and a new line between the title and the body of the note environment:

```
\theorembodyfont{\upshape}  
\theoremheaderfont{\scshape}  
\theorempostheader{:}  
\theoremsep{\newline}  
\newtheorem*{note}{Note}
```

Now it can be used in the document environment:

```
\begin{note}  
This is an numbered theorem-like environment.  
\end{note}
```

## 2.5.6 Cross-Referencing

Always use `\label` when cross-referencing, rather than writing the number explicitly. The `jmlrutils` package provides some convenience commands to assist referencing. These com-

mands, described below, can all take a comma-separated list of labels.

`\sectionref` `\sectionref{<label list>}`

Used to refer to a section or sections. For example, if you defined a section as follows:

```
\chapter{Results}\label{sec:results}
```

you can refer to it as follows:

The results are detailed in `\sectionref{sec:results}`.

This command may also be used for sub-sections and sub-sub-sections.

`\appendixref` `\appendixref{<label list>}`

Used to refer to an appendix or multiple appendices.

`\equationref` `\equationref{<label list>}`

Used to refer to an equation or multiple equations.

`\tableref` `\tableref{<label list>}`

Used to refer to a table or multiple tables. This can also be used for sub-tables where the main table number is also required.

`\subtabref` `\subtabref{<label list>}`

Used to refer to sub-tables without the main table number, e.g. (a) or (b).

`\figureref` `\figureref{<label list>}`

Used to refer to a figure or multiple figures. This can also be used for sub-figures where the main figure number is also required, e.g. 2(a) or 4(b).

`\subfigref` `\subfigref{<label list>}`

Used to refer to sub-figures without the main figure number, e.g. (a) or (b).

`\algorithmref` `\algorithmref{<label list>}`

Used to refer to an algorithm or multiple algorithms.

`\theoremref` `\theoremref{<label list>}`

Used to refer to a theorem or multiple theorems.

`\lemmaref` `\lemmaref{\langle label list \rangle}`

Used to refer to a lemma or multiple lemmas.

`\remarkref` `\remarkref{\langle label list \rangle}`

Used to refer to a remark or multiple remarks.

`\corollaryref` `\corollaryref{\langle label list \rangle}`

Used to refer to a corollary or multiple corollaries.

`\definitionref` `\definitionref{\langle label list \rangle}`

Used to refer to a definition or multiple definitions.

`\conjectureref` `\conjectureref{\langle label list \rangle}`

Used to refer to a conjecture or multiple conjectures.

`\axiomref` `\axiomref{\langle label list \rangle}`

Used to refer to an axiom or multiple axioms.

`\exampleref` `\exampleref{\langle label list \rangle}`

Used to refer to an example or multiple examples.

## 2.5.7 Mathematics

The `jmlr` class loads the `amsmath` package so you can use any of the commands and environments defined in that package. The `jmlrutils` package will load `amsmath` if the default `maths` package option is used but won't load `amsmath` if the `nomaths` option is used. A brief summary of some of the more common commands and environments is provided here. See the `amsmath` documentation<sup>3</sup> for further details.

`\set` `\set{\langle maths \rangle}`

In addition to the commands provided by `amsmath`, the `jmlrutils` package also provides the `\set` command which can be used to typeset a set. For example:

The universal set is denoted  $\set{U}$

This command won't be provided if the `nomaths` option is used.

---

<sup>3</sup><http://ctan.org/pkg/amsmath>

`\vec` `\vec{<maths>}`

The `\vec` command is redefined by `jmlrutils` to use `\boldsymbol`, which is provided by `amsmath`. (This command won't be redefined if the `nomaths` option is used.) If you require the original `\vec`, you can access it with:

`\orgvec` `\orgvec{<maths>}`

This command won't be provided if the `nomaths` option is used.

Unnumbered single-line equations should be displayed using `\[` and `\]`. For example:

```
\[E = m c^2\]
```

Numbered single-line equations should be displayed using the `equation` environment. For example:

```
\begin{equation}\label{eq:trigrule}
\cos^2\theta + \sin^2\theta \equiv 1
\end{equation}
```

The above are provided by the  $\TeX$  kernel but may be adjusted by packages such as `amsmath`. The commands and environments below are provided by `amsmath`.

Multi-lined numbered equations should be displayed using the `align` environment. For example:

```
\begin{align}
f(x) &= x^2 + x \label{eq:f} \\
f'(x) &= 2x + 1 \label{eq:df}
\end{align}
```

Unnumbered multi-lined equations should be displayed using the `align*` environment. For example:

```
\begin{align*}
f(x) &= (x+1)(x-1) \\
&= x^2 - 1
\end{align*}
```

If you want to mix numbered with unnumbered lines use the `align` environment and suppress unwanted line numbers with `\nonumber`. For example:

```
\begin{align}
y &= x^2 + 3x - 2x + 1 \nonumber \\
&= x^2 + x + 1 \label{eq:y}
\end{align}
```

An equation that is too long to fit on a single line can be displayed using the `split` environment.

Text can be embedded in an equation using `\text{<text>}` or you can use `\intertext{<text>}` to interrupt a multi-line environment such as `align`.

Predefined operator names are listed in [table 2.1](#). For additional operators, either use

`\operatorname`

```
\operatorname{<name>}
```

for example

If  $X$  and  $Y$  are independent,  
 $\operatorname{var}(X+Y) =$   
 $\operatorname{var}(X) + \operatorname{var}(Y)$

or declare it with

`\DeclareMathOperator`

```
\DeclareMathOperator{<command>}{<name>}
```

for example

```
\DeclareMathOperator{var}{var}
```

and then use this new command:

If  $X$  and  $Y$  are independent,  
 $\var(X+Y) = \var(X) + \var(Y)$

If you want limits that go above and below the operator (like `\sum`) use the starred versions (`\operatorname*` or `\DeclareMathOperator*`).

Table 2.1: Predefined Operator Names (taken from amsmath documentation)

<code>\arccos</code>	<code>arccos</code>	<code>\deg</code>	<code>deg</code>	<code>\lg</code>	<code>lg</code>	<code>\projlim</code>	<code>projlim</code>
<code>\arcsin</code>	<code>arcsin</code>	<code>\det</code>	<code>det</code>	<code>\lim</code>	<code>lim</code>	<code>\sec</code>	<code>sec</code>
<code>\arctan</code>	<code>arctan</code>	<code>\dim</code>	<code>dim</code>	<code>\liminf</code>	<code>liminf</code>	<code>\sin</code>	<code>sin</code>
<code>\arg</code>	<code>arg</code>	<code>\exp</code>	<code>exp</code>	<code>\limsup</code>	<code>limsup</code>	<code>\sinh</code>	<code>sinh</code>
<code>\cos</code>	<code>cos</code>	<code>\gcd</code>	<code>gcd</code>	<code>\ln</code>	<code>ln</code>	<code>\sup</code>	<code>sup</code>
<code>\cosh</code>	<code>cosh</code>	<code>\hom</code>	<code>hom</code>	<code>\log</code>	<code>log</code>	<code>\tan</code>	<code>tan</code>
<code>\cot</code>	<code>cot</code>	<code>\inf</code>	<code>inf</code>	<code>\max</code>	<code>max</code>	<code>\tanh</code>	<code>tanh</code>
<code>\coth</code>	<code>coth</code>	<code>\injlim</code>	<code>injlim</code>	<code>\min</code>	<code>min</code>		
<code>\csc</code>	<code>csc</code>	<code>\ker</code>	<code>ker</code>	<code>\Pr</code>	<code>Pr</code>		
		<code>\varlimsup</code>	$\overline{\lim}$	<code>\varinjlim</code>	$\varinjlim$		
		<code>\varliminf</code>	$\underline{\lim}$	<code>\varprojlim</code>	$\varprojlim$		

## 2.6 Color vs Grayscale

It's helpful if authors supply grayscale versions of their articles in the event that the article is to be incorporated into a black and white printed book. With external PDF, PNG or JPG graphic files, you just need to supply a grayscale version of the file. For example, if the file is called

myimage.png, then the gray version should be myimage-gray.png or myimage-gray.pdf or myimage-gray.jpg. You don't need to modify your code. The jmlr class checks for the existence of the grayscale version if it is print mode (provided you have used `\includegraphics` and haven't specified the file extension). This check is performed by code provided by the jmlr class not the jmlrutils package.

`\ifprint`

```
\ifprint{<true part>}{<>false part>}
```

You can use `\ifprint` to determine which mode you are in. For example:

```
in \figureref{fig:nodes}, the
\ifprint{dark gray}{purple}
ellipse represents an input and the
\ifprint{light gray}{yellow} ellipse
represents an output.
```

Another example:

```
{\ifprint{\bfseries}{\color{red}}important text!}
```

You can use the class option `gray` to see how the document will appear in gray scale mode.

The `xcolor` class is loaded with the `x11names` option, so you can use any of the x11 predefined colors (listed in the `xcolor` documentation<sup>4</sup>).

## 2.7 Where To Go For Help

If you have a general  $\text{\TeX}$  query, the first place to go to is the  $\text{\TeX}$  FAQ<sup>5</sup>.

If you are unfamiliar or just getting started with  $\text{\TeX}$ , there's a list of on-line introductions to  $\text{\TeX}$  at <https://texfaq.org/FAQ-man-latex> or have a look at  [\$\text{\TeX}\$  for Complete Novices](#).

There are also forums, mailing lists and newsgroups. For example,  $\text{\TeX}$  on StackExchange (<https://tex.stackexchange.com/>), the  $\text{\TeX}$  Community (<https://latex.org/forum/>), the texhax mailing list (<http://tug.org/mailman/listinfo/texhax>) and `comp.text.tex` (archives available at <http://groups.google.com/group/comp.text.tex/>).

Documentation for packages or classes can be found using the `texdoc` application. For example:

```
texdoc natbib
```

Alternatively, you can go to <http://www.ctan.org/pkg/<name>> where `<name>` is the name of the package. For example: <http://www.ctan.org/pkg/natbib>

For a general guide to preparing papers (regardless of whether you are using  $\text{\TeX}$  or a word processor), see Kate L. Turabian, "A manual for writers of term papers, theses, and dissertations", The University of Chicago Press, 1996.

---

<sup>4</sup><http://ctan.org/pkg/xcolor>

<sup>5</sup><https://texfaq.org/>

## 3 Guidelines for Production Editors

The `jmlrbook` class can be used to combine articles that use the `jmlr` document class into a book. The following sample files are provided: `paper1/paper1.tex`, `paper2/paper2.tex`, `paper3/paper3.tex`, `jmlr-sample.tex`, `jmlrwcp-sample.tex`, `jmlrbook-sample.tex` and `proceedings-sample.tex`. All but the last two are articles using the `jmlr` class. The last two (`jmlrbook-sample.tex` and `proceedings-sample.tex`) uses the `jmlrbook` class file to combine the articles into a book. Note that no modifications are needed to the files using the `jmlr` class when they are imported into the book. They can either be compiled as stand-alone articles or with the entire book.

Before you compile the book, make sure that all the articles compile as stand-alone documents (and run BibTeX where necessary). You can use the `makejmlrbookgui` application to compile the book. See <http://www.dickimaw-books.com/software/makejmlrbookgui/> for details.

### 3.1 `jmlrbook` Class Options

**nowcp** The imported pre-published articles were published in the Journal of Machine Learning Research (default).

**pmlr** The imported pre-published articles were published in the Proceedings of Machine Learning Research (PMLR).

**wcp** The imported pre-published articles were published in the JMLR Workshop and Conference Proceedings (JMLR W&CP).

If the book has a mixture of JMLR, JMLR W&CP or PMLR articles, you can switch between them using

`\jmlrnowcp`

`\jmlrnowcp`

(for JMLR) or

`\jmlrwcp`

`\jmlrwcp`

(for JMLR W&CP) or

`\jmlrpmlr`

`\jmlrpmlr`

(for PMLR). Alternatively, you can set the name of the journal or conference proceedings using:

jmlrproceedings

```
\jmlrproceedings{<short title>}{<long title>}
```

**color** Color version (see Section 2.6). Use this option for the on-line version with hyperlinks enabled (default).

**gray** Grayscale version (see Section 2.6). Use this option for the print version without hyperlinks.

**tablecaption=top** in a table environment, `\floatconts` puts the caption at the top.

**tablecaption=bottom** in a table environment, `\floatconts` puts the caption at the bottom.

**letterpaper** Set the paper size to letter (default).

**7x10** Set the paper size to 7 × 10 inches.

**10pt** Use 10pt as the normal text size.

**11pt** Use 11pt as the normal text size (default).

**12pt** Use 12pt as the normal text size.

## 3.2 The Preamble

Any packages that the imported articles load (which aren't automatically loaded by `jmlr`) must be loaded in the book's preamble. For example, if one or more of the articles load the `siunitx` package, this package must be loaded in the book.

Commands that are defined in the imported articles will be local to that article unless they have been globally defined using `\gdef` or `\global`. Since most authors use `\newcommand` and `\newenvironment` (or `\renewcommand` and `\renewenvironment`) this shouldn't cause a conflict if more than one article has defined the same command or environment. For example, in the sample files supplied, both `paper1/paper1.tex` and `paper2/paper2.tex` have defined the command `\samplecommand` using `\newcommand`. As long as this command isn't also defined in the book, there won't be a conflict.

`\title`

```
\title[<PDF title>]{<book title>}
```

In the book preamble, `\title` sets the book title and the optional argument is used for the PDF title, which will be displayed when the reader views the PDF file's properties in their PDF viewer. (Note that in the imported articles, `\title` sets the article's title and the optional argument sets the short title for the page header and table of contents.)

`\author`

```
\author[<PDF author(s)>]{<book author(s)>}
```



In the book preamble, `\author` sets the book's author (or editor) and the optional argument is used for the PDF author, which will be displayed when the reader views the PDF file's properties in their PDF viewer. (Note that in the imported articles, `\author` sets the article's author and the optional argument sets the short author list for the page header.)

`\volume` `\volume{<number>}`

This command sets the book's volume number. Omit if the book has no volume number.

`\subtitle` `\subtitle{<sub-title>}`

This command sets the book's subtitle. Omit if the book has no sub-title.

`\logo` `\logo[<url>]{<image command>}`

This sets the book's title image. Use `\includegraphics` and omit the file extension. If you provide a grayscale version as well as a color version, the grayscale version will be used for the print version of the book. (See Section 2.6 for further details.) The optional argument, if present, was formerly used by `makejmlrbookgui` to make the logo a link to `<url>` on the index HTML page. (The HTML pages are no longer generated by the application as PMLR now generate the HTML from the `.bib` file for the proceedings.)

`\team` `\team{<team title>}`

This can be used to set the name of the editorial team. This command may be omitted if not required.

`\productioneditor` `\productioneditor{<name>}`

This command may be used to name the production editor. The command may be omitted if not required.

`\jmlrlocation` `\jmlrlocation{<location>}`

This specifies the workshop location. By default this doesn't appear on the title page. See Section 3.4 for details on how to modify the layout of the title page.

### 3.3 Main Book Commands

All commands that are provided by the `jmlr` class are also available with the `jmlrbook` class, but some commands might behave differently depending on whether they are in the main part of the book or within the imported articles.

In the main part of the book you can use the following commands:

`\maketitle` `\maketitle`

This displays the book's title page. Note that `\maketitle` has a different effect when used in imported articles.

`\frontmatter`

```
\frontmatter
```

Use this command at the start of the front matter (e.g. before the foreword or preface). This will make chapters unnumbered even if you use `\chapter` instead of `\chapter*`. It also sets the page style and sets the page numbering to lower case Roman numerals.

`authorsignoff`

```
\begin{authorsignoff}
<author list>
\end{authorsignoff}
```

This environment may be used by the author signing off at the end of a chapter such as the foreword. Within the environment use:

`\Author`

```
\Author{<details>}
```

for the author's details. More than one `\Author` should be used if there is more than one author. Example:

```
\begin{authorsignoff}
\Author{Nicola Talbot\
University of East Anglia}
\Author{Anne Author\
University of No Where}
\end{authorsignoff}
```

`preface`

```
\begin{preface}[<filename>]
```

This environment may be used to typeset the preface. This starts a new chapter using `\chapter{\prefacename}`

`\prefacename`

where `\prefacename` defaults to "Preface". This environment should typically go in the front matter and is provided to allow `makejmlrbookgui` create a standalone document for the preface. The optional argument is the filename (without any extension or path) that will be used by `makejmlrbookgui`. This defaults to `preface` but, to conform with PMLR guidelines, should be changed to the surname of the first author (editor) followed by the final two digits of the year. See the PMLR website for further details of the guidelines.

`signoff`

```
\begin{signoff}[<team name>]{<date>}
<editor list>
\end{signoff}
```

This environment may be used by the editorial team when signing off a chapter such as the preface. If the optional argument is omitted, "The Editorial Team" is used. If you are using

the preface environment described above, the signoff environment must go inside the preface environment.

Within the signoff environment use:

`\Editor` `\Editor{<details>}`

for each editor. Example:

```
\begin{signoff}{March 2010}
% First editor:
\Editor{Nicola Talbot\
University of East Anglia\
\mailto{N.Talbot@uea.ac.uk}}
% Second editor:
\Editor{Anne Editor\
University of Nowhere\
\mailto{ae@sample.com}}
\end{signoff}
```

`\tableofcontents` `\tableofcontents`

This command displays the book's table of contents. Note that it has a different effect if used in an imported article.

`\mainmatter` `\mainmatter`

Use this command to switch to the book's main matter. This will switch the chapter numbering back on, reset the page numbering to Arabic and set up the main page style.

`\part` `\part[<short title>]{<title>}`

If used in the main part of the book, this command will start a new part and issue a clear double page. Note that this command has a different effect if used in an imported article (or inside the `jmlrpapers` environment).

`\addtocpart` `\addtocpart{<title>}`

This adds `<title>` to the table of contents, issues a clear double page, but doesn't display any text or affect the part numbering.

`\chapter` `\chapter[<short title>]{<title>}`

This command may be used in the main body of the book but will cause an error if used within an imported article (or inside the `jmlrpapers` environment).

`\section` `\section[<short title>]{<title>}`

`\subsection[<short title>]{<title>}`

`\subsubsection[<short title>]{<title>}`

`\paragraph[<short title>]{<title>}`

`\subparagraph[<short title>]{<title>}`

These commands may be used in the main body of the book or within imported articles. In the main body of the book (outside of the `jmlrpapers` environment) they need to be within a chapter and will be numbered according to the chapter.

`\appendix`

If used in the main body of the book (*outside* of the `jmlrpapers` environment) this will switch to the book appendices. Subsequent `\chapter` commands will produce the appendices. (Any imported articles in the appendix will be identified by `makejmlrbookgui` as supplemental material.) If used within an imported article (or within the `jmlrpapers` environment) `\appendix` will switch to the article appendices and won't affect the main part of the book.

`\begin{jmlrpapers}`  
`<imported papers>`  
`\end{jmlrpapers}`

This environment must be used when importing articles and may be used as often as required. Take care not to include book sectioning commands, such as `\chapter`, in this environment. Within the `jmlrpapers` environment, use the following commands to import articles:

`\importpubpaper[<label>]{<directory>}{<file>}{<pages>}`

This imports an article that has already been published elsewhere. The *<pages>* argument should be the page range from the *previously published* version of this article. This may not necessarily be the same as the page range of the article in the book. The directory the imported file is contained in is given by *<directory>*. If the file is in the same directory as the book, use a dot. The file name is given by *<file>*. The article is also given a label, specified by the optional argument. This is *<directory>/<file>* by default. The label is used as a prefix to labels in the imported articles which ensures that cross-references are unique. You can also use this label to reference the article elsewhere in the book (see Section [3.3.2](#)).

`\importpaper[<label>]{<directory>}{<file>}`

Imports an article that is being published in the book. The arguments are the same as above except that there is no page range (the page range is computed automatically).

`\importarticle`

```
\importarticle[⟨label⟩]{⟨directory⟩}{⟨file⟩}
```

This imports an article that hasn't been published elsewhere. There is no page range, but the other arguments are the same as those describe above for `\importpubpaper`.

Example: to import a previously published paper `paper1/paper1.tex` and an unpublished paper `paper2/paper2.tex`:

```
\begin{jmlrpapers}
\importpubpaper{paper1}{paper1}{23--45}
\importarticle{paper2}{paper2}
\end{jmlrpapers}
```

### 3.3.1 Two Column Articles in a One Column Book

The `jmlrbook` class `column` style will override the `column` style of the imported articles. You can use the `twocolumn` class option to `jmlrbook`, but this will make the whole book with two columns. If you only want the imported articles to be in two columns, then put `\twocolumn` in the `jmlrpapers` environment to switch on two column formatting. The effect will be localised to the end of the environment.

### 3.3.2 Cross-Referencing

You can cross-reference other parts of the book using the standard `\label/\ref` mechanism, but if you want to reference something within an imported article, you must prefix the label with the label given when importing the article (that is, the optional argument to `\importpubpaper`, `\importpaper` or `\importarticle`). For example, if you want to reference a section labelled `sec:results` in the imported paper `paper1/paper1.tex`, you would need to do:

```
see Section~\ref{paper1/paper1sec:results}
```

or

```
see \sectionref{paper1/paper1sec:results}
```

In addition to the commands described in Section 2.5.6, the `jmlrbook` class also provides the following cross-referencing commands:

`\chapterref`

```
\chapterref{⟨label list⟩}
```

Reference a chapter or chapters. The argument is a comma-separated list of labels.

`\articlepageref`

```
\articlepageref{⟨label⟩}
```

This displays the starting page number of the article whose label is given by  $\langle label \rangle$ . Note that this must be a single label, not a list. For example:

An interesting article starts on page `\articlepageref{paper1/paper1}`

`\articlepagesref`

```
\articlepagesref{\langle label \rangle}
```

This displays the page range of the article whose label is given by  $\langle label \rangle$ . Again, this must be a single label, not a list. This page range is unrelated to the  $\langle pages \rangle$  argument of `\importpubarticle`.

`\articletitleref`

```
\articletitleref{\langle label \rangle}
```

This displays the short title for the article whose label is given by  $\langle label \rangle$ . Again, this must be a single label, not a list.

`\articleauthorref`

```
\articleauthorref{\langle label \rangle}
```

This displays the author list for the article whose label is given by  $\langle label \rangle$ . Again, this must be a single label, not a list.

### 3.4 Altering the Layout of the Main Title Page

`\titlebody`

```
\titlebody
```

The main body of the book's title page is given by the command `\titlebody`. Within the definition of this command, you can use:

`\SetTitleElement`

```
\SetTitleElement{\langle element \rangle}{\langle pre \rangle}{\langle post \rangle}
```

where  $\langle element \rangle$  can be: `title`, `volume`, `issue`<sup>1</sup>, `subtitle`, `logo`, `team`, `author`, `date`, `productioneditor`. The  $\langle pre \rangle$  and  $\langle post \rangle$  arguments specify what to do before and after the element. Note that `\SetTitleElement` does nothing if that element hasn't been set. For example, if `\volume` has been omitted or `\volume{}` is used, then

```
\SetTitleElement{volume}{\mainvolumefont}{\postmainvolume}
```

will do nothing (so you don't end up with **Volume** :).

`\IfTitleElement`

```
\IfTitleElement{\langle element \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

This does  $\langle true part \rangle$  if  $\langle element \rangle$  has been set otherwise it does  $\langle false part \rangle$ . For example, `\postmainvolume` is defined as:

---

<sup>1</sup>The default title page layout doesn't use `issue`, but if required it can be set with `\issue{\langle number \rangle}`

```

\newcommand{\postmainvolume}{%
  \IfTitleElement{subtitle}{:}{:}\par\relax
}

```

This means that it will only print a colon after the volume number if the subtitle has been set. The default definition of `\titlebody` is:

```

\newcommand{\titlebody}{%
  \SetTitleElement{title}{\maintitlefont}{\postmaintitle}%
  \SetTitleElement{volume}{\mainvolume font}{\postmainvolume}%
  \SetTitleElement{subtitle}{\mainsubtitlefont}{\postmainsubtitle}%
  \SetTitleElement{logo}{\mainlogofont}{\postmainlogo}%
  \SetTitleElement{team}{\mainteamfont}{\postmainteam}%
  \SetTitleElement{author}{\mainauthorfont}{\postmainauthor}%
  \SetTitleElement{productioneditor}{\mainproductioneditorfont}{%
    {\postmainproductioneditor}%
  }
}

```

### 3.5 Potential Pitfalls

The `combine` class and `hyperref` package are individually both easily broken by packages that change certain internals and they don't ordinarily work together. The `jmlrbook` class applies patches to the internal referencing mechanism to make them work together, but it's a fairly fragile alliance. Some packages are known to break it, for example `subfig`, `pdfpages` and `geometry`. This is why the `jmlr` class checks for known problem packages and generates an error message to dissuade authors from using them. It's likely that there are other packages that may cause a problem and, as they are found, they will be added to the check list. Also, it's possible for an author to disable the package checking mechanism if they are determined to use a particular package.

In the event that an article has loaded a problem package, the editors will have to decide whether to ask the author to change the article so that it doesn't cause a problem or to make the changes themselves or to find a way of fudging things to get it to work. It depends on the level of  $\LaTeX$  expertise amongst the editors and the time available.

Another problem that can arise is when different articles use packages that conflict. For example, one article uses package `foo` and another uses package `bar`. Each article compiles okay as a stand-alone article, but when combined `foo` and `bar` conflict. Another problem may occur when articles load the same package but with conflicting package options. To reduce the chance of this occurring, the `jmlr` class loads some commonly used packages. For example, it loads the `algorithm2e` package with the `algo2e` and `ruled` options and provides the `algorithm` environment in addition to `algorithm2e`'s `algorithm2e` environment. Different versions of the same package can also be a problem. To help counteract the problem caused by different papers using different versions of the `algorithm2e` package, `jmlrbook` defines most of the old style commands if they don't exist.

Articles that use different input encodings can also cause a problem. For example, if one article uses `utf8` and another uses `latin1`. If the authors have directly entered a diacritic or ligature, such as `é` or `æ`, instead of using a  $\LaTeX$  command, such as `\'e` or `\ae`, then this will

cause an error on compiling the book.<sup>2</sup> The choice then is to either change all non-keyboard characters with the appropriate  $\LaTeX$  commands or to use the `\inputencoding` command, supplied by the `inputenc` package, to switch the encoding at the start of each article. One thing to watch out for are bib files that contain a mixture of encodings caused by copying and pasting from different sources. Version 0.4.2b of `makejmlrbookgui` provides a function to search for characters outside the range 0x20 (space) and 0x7E (tilde).

Authors who use `\nonumber` within an equation environment can mess up the hyperlinks. Remove `\nonumber` and change the equation environment to `\[ ... \]` (or just make it a numbered equation).

If the article changes the graphics path using `\graphicspath`, `jmlrbook` won't find the graphics if the imported articles aren't in the same directory as the book.

The `makejmlrbookgui` application provides some diagnostic tools, which can help detect some common problems. It's manual also has a [troubleshooting section](#).

---

<sup>2</sup>and may also cause a problem for the editor's text editor.



## 4 The Code

### 4.1 jmlrutils.sty Code

Non-class dependent code. This package is automatically loaded by jmlr but may be used with other classes.

```
1 \ProvidesPackage{jmlrutils}[2020/09/21 v1.28 (NLCT)]
```

Package options:

fjmlrutilsmaths Determine if the maths commands should be provided.

```
2 \newif\ifjmlrutilsmaths
3 \jmlrutilsmathstrue

4 \DeclareOption{maths}{\jmlrutilsmathstrue}
5 \DeclareOption{nomaths}{\jmlrutilsmathsfalse}
```

lutilstheorems Determine if the theorem environments should be provided.

```
6 \newif\ifjmlrutilstheorems
7 \jmlrutilstheoremstrue

8 \DeclareOption{theorems}{\jmlrutilstheoremstrue}
9 \DeclareOption{notheorems}{\jmlrutilstheoremsfalse}
```

rutilssubfloats Determine if the sub-floats should be provided.

```
10 \newif\ifjmlrutilssubfloats
11 \jmlrutilssubfloatstrue

12 \DeclareOption{subfloats}{\jmlrutilssubfloatstrue}
13 \DeclareOption{nosubfloats}{\jmlrutilssubfloatsfalse}
```

```
14 \ProcessOptions
```

Requires etoolbox:

```
15 \RequirePackage{etoolbox}
```

If the maths commands are needed, load amsmath.

```
16 \ifjmlrutilsmaths
17   \RequirePackage{amsmath}
18 \fi
```

The conditional `\iftablecaptiontop` will already have been defined by the jmlr class, so only needs to be defined if not already done.

tablecaptiontop

```
19 \ifundefined{iftablecaptiontop}
20 {\newif\iftablecaptiontop
21 \tablecaptiontoptrue}
22 {}
```

### 4.1.1 Cross-Referencing

Convenient macros for cross-referencing.

```
23 \newcommand*{\@jmlr@reflistsep}{, }
24 \newcommand*{\@jmlr@reflistlastsep}{ and }
25 \newcommand*{\sectionrefname}{Section}
26 \newcommand*{\sectionsrefname}{Sections}
27 \newcommand*{\equationrefname}{Equation}
28 \newcommand*{\equationsrefname}{Equations}
29 \newcommand*{\tablerefname}{Table}
30 \newcommand*{\tablesrefname}{Tables}
31 \newcommand*{\figurerefname}{Figure}
32 \newcommand*{\figuresrefname}{Figures}
33 \newcommand*{\algorithmrefname}{Algorithm}
34 \newcommand*{\algorithmsrefname}{Algorithms}
35 \newcommand*{\theoremrefname}{Theorem}
36 \newcommand*{\theoremsrefname}{Theorems}
37 \newcommand*{\lemmarefname}{Lemma}
38 \newcommand*{\lemmasrefname}{Lemmas}
39 \newcommand*{\remarkrefname}{Remark}
40 \newcommand*{\remarksrefname}{Remarks}
41 \newcommand*{\corollaryrefname}{Corollary}
42 \newcommand*{\corollarysrefname}{Corollaries}
43 \newcommand*{\definitionrefname}{Definition}
44 \newcommand*{\definitionsrefname}{Definitions}
45 \newcommand*{\conjecturerefname}{Conjecture}
46 \newcommand*{\conjecturesrefname}{Conjectures}
47 \newcommand*{\axiomrefname}{Axiom}
48 \newcommand*{\axiomsrefname}{Axioms}
49 \newcommand*{\examplerefname}{Example}
50 \newcommand*{\examplesrefname}{Examples}
51 \newcommand*{\appendixrefname}{Appendix}
52 \newcommand*{\appendixsrefname}{Appendices}
53 \newcommand*{\partrefname}{Part}
54 \newcommand*{\partsrefname}{Parts}
```

`\objectref` Cross-reference a particular structural element. The first argument is the list of labels, the second argument is a control sequence containing the singular tag, the third argument a control sequence containing the plural tag, the fourth argument is text to go before the reference number, e.g. an opening bracket, and the fifth argument is text to go after the reference number, e.g. a closing bracket.

```
55 \newrobustcmd*{\objectref}[5]{%
```

```

56 \let\@objectname\@empty
57 \def\@objectref{}%
58 \let\@prevsep\@empty
59 \@for\@thislabel:=#1\do{%
60   \toks@{\@prevsep}%
61   \protected@edef\@objectref{\@objectref\the\toks@
62     #4\ref{\@thislabel}#5}%
63   \ifx\@objectname\@empty
64     \let\@objectname#2% singular tag
65   \else
66     \let\@objectname#3% plural tag
67     \let\@prevsep\@jmlr@reflistsep
68   \fi
69 }%
70 \ifx\@objectname#3% plural tag
71   \let\@prevsep\@jmlr@reflistlastsep
72 \fi
73 \@objectname~\@objectref
74 }

```

\sectionref

```

75 \newcommand*\sectionref[1]{%
76   \objectref{#1}{\sectionrefname}{\sectionsrefname}{}}

```

\equationref

```

77 \newcommand*\equationref[1]{%
78   \objectref{#1}{\equationrefname}{\equationsrefname}()}

```

\tableref

```

79 \newcommand*\tableref[1]{%
80   \objectref{#1}{\tablerefname}{\tablesrefname}{}}

```

\figureref

```

81 \newcommand*\figureref[1]{%
82   \objectref{#1}{\figurerefname}{\figuresrefname}{}}

```

\algorithmref

```

83 \newcommand*\algorithmref[1]{%
84   \objectref{#1}{\algorithmrefname}{\algorithmsrefname}{}}

```

\theoremref

```

85 \newcommand*\theoremref[1]{%
86   \objectref{#1}{\theoremrefname}{\theoremsrefname}{}}

```

\lemmaref

```

87 \newcommand*\lemmaref[1]{%
88   \objectref{#1}{\lemmarefname}{\lemmasrefname}{}}

```

`\remarkref`

```
89 \newcommand*\remarkref[1]{%
90 \objectref{#1}{\remarkrefname}{\remarksrefname}{}}}
```

`\corollaryref`

```
91 \newcommand*\corollaryref[1]{%
92 \objectref{#1}{\corollaryrefname}{\corollarysrefname}{}}}
```

`\definitionref`

```
93 \newcommand*\definitionref[1]{%
94 \objectref{#1}{\definitionrefname}{\definitionsrefname}{}}}
```

`\conjectureref`

```
95 \newcommand*\conjectureref[1]{%
96 \objectref{#1}{\conjecturerefname}{\conjecturesrefname}{}}}
```

`\axiomref`

```
97 \newcommand*\axiomref[1]{%
98 \objectref{#1}{\axiomrefname}{\axiomsrefname}{}}}
```

`\exampleref`

```
99 \newcommand*\exampleref[1]{%
100 \objectref{#1}{\examplerefname}{\examplesrefname}{}}}
```

`\appendixref`

```
101 \newcommand*\appendixref[1]{%
102 \objectref{#1}{\appendixrefname}{\appendixsrefname}{}}}
```

`\partref`

```
103 \newcommand*\partref[1]{%
104 \objectref{#1}{\partrefname}{\partsrefname}{}}}
```

### 4.1.2 Figures, Tables and Algorithms

`\floatconts` The first argument is the label, the second argument contains the caption (using `\caption`) and the third argument contains the contents of the float

```
105 \newcommand{\floatconts}[3]{%
106 \@ifundefined{\@capttype conts}{\tableconts{#1}{#2}{#3}}%
107 {\csname\@capttype conts\endcsname{#1}{#2}{#3}}%
108 }
```

`\tableconts` This will already have been defined if the `jmlr` class was loaded.

```
109 \providecommand{\tableconts}[3]{%
110 #2\label{#1}\vskip\baselineskip
111 {\centering #3\par}%
112 }
```

`\figureconts`

```
113 \newcommand{\figureconts}[3]{%
114   {\centering #3\par}%
115   \vskip\baselineskip
116   #2\label{#1}%
117 }
```

The following macro and environment assume that `algorithm2e` has been loaded (which is done by the `jmlr` class). If the `jmlrutils` package is loaded without the `jmlr` class, the `algorithm2e` package will have to be explicitly loaded.

`\algocfconts` Command used by `\floatconts` to display the caption contents.

```
118 \newcommand{\algocfconts}[3]{%
119   \@algocf@pre@ruled
120   #2\label{#1}\kern2pt\hrule height.8pt depth0pt\kern2pt%
121   #3\@algocf@pre@ruled
122 }
```

The `algorithm` environment should float like a figure or table. It should use the same counter as the `algorithm2e` environment.

```
123 \newenvironment{algorithm}[1][htbp]%
124 {%
125   \ifundef{\algocf}%
126   {'algorithm2e' package is required if you want to
127   use the algorithm environment}%
128   {}%
129   \begin{algocf}[#1]%
130   \renewcommand\@makecaption[2]{%
131     \hskip\AlCapHSkip
132     \parbox[t]{\hsize}{\algocf@captiontext{##1}{##2}}%
133   }%
134 }%
135 {%
136   \end{algocf}%
137 }
```

`fgraphicxloaded`

```
138 \AtBeginDocument{%
139   \@ifpackageloaded{graphicx}%
140   {\let\@jmlr@ifgraphicxloaded\@firstoftwo}%
141   {\let\@jmlr@ifgraphicxloaded\@secondoftwo}%
142 }
```

`\includeteximage` Provide a command like `\includegraphics` that includes a file containing  $\LaTeX$  picture code (e.g. `pgf`).

```
143 \newcommand*\includeteximage[2][ ]{%
144   \@jmlr@ifgraphicxloaded
145   {%
```

```

146 \def\Gin@req@sizes{%
147   \Gin@req@height\Gin@nat@height
148   \Gin@req@width\Gin@nat@width}%
149 \begingroup
150 \let\input@path\Ginput@path
151 \IfFileExists{#2}%
152  {%
153   \toks@{\input{#2}}%
154   \ifstrempy{#1}
155   {}%
156   {%
157    \@tempwattrue
158    \setkeys{Gin}{#1}%
159    \Gin@esetsize
160   }%
161   \the\toks@
162  }%
163  {\@warning{File ‘#2’ not found}}%
164 \endgroup
165 }%
166 {\PackageError{jmlrutils}{'graphicx' package is required
167  if you want to use \string\includeteximage}{}}%
168 }

```

Sub floats.

```
169 \ifjmlrutilssubfloats
```

The subfig package breaks jmlrbook.cls, so define \subfig here. (This is fairly primitive.)

\c@subfigure Define subfigure counter:

```

170 \newcounter{subfigure}
171 \@addtoreset{subfigure}{figure}

```

\thesubfigure

```
172 \renewcommand*{\thesubfigure}{\alph{subfigure}}
```

\p@subfigure

```

173 \renewcommand*{\p@subfigure}{\expandafter\@p@subfigure}
174 \newcommand*{\@p@subfigure}[1]{%
175   \protect\@subfigurelabel{\thefigure}{\thesubfigure}%
176 }

```

The LaTeX kernel changed the definition of \refstepcounter to allow \p@. . . to have an argument. This means we need to check the kernel version and pick up that extra argument if present.

```

177 \@ifl@t@r\fmtversion{2019/08/22}%
178 {

```

Newer kernel versions.

@subfigurelabel Define how label appears.

```
179 \newcommand*\@subfigurelabel[3]{#1\subfigurelabel{#2}}
```

\@subfigref

```
180 \newcommand*\@subfigref[1]{%
181   {%
182     \def\@subfigurelabel##1##2##3{\subfigurelabel{##2}}%
183     \ref{#1}%
184   }%
185 }

186 }%
187 {
```

Older kernel versions.

@subfigurelabel Define how label appears.

```
188 \newcommand*\@subfigurelabel[2]{#1\subfigurelabel{#2}}
```

\@subfigref

```
189 \newcommand*\@subfigref[1]{%
190   {%
191     \def\@subfigurelabel##1##2{\subfigurelabel{##2}}%
192     \ref{#1}%
193   }%
194 }

195 }
```

\subfigref Reference the sub-figure without including the figure number.

```
196 \newcommand*\@subfigref[1]{%
197   \let\@objectname\@empty
198   \def\@objectref{}%
199   \let\@prevsep\@empty
200   \@for\@thislabel:=#1\do{%
201     \toks@{\@prevsep}%
202     \protected@edef\@objectref{\@objectref\the\toks@
203       \protect\@subfigref{\@thislabel}}%
204     \ifx\@objectname\@empty
205       \let\@objectname\@nil
206     \else
207       \let\@objectname\relax
208       \let\@prevsep\@jmlr@reflistsep
209     \fi
210   }%
211   \ifx\@objectname\relax
212     \let\@prevsep\@jmlr@reflistlastsep
213   \fi
214   \@objectref
215 }
```

`\subfigurelabel`

216 `\newcommand*{\subfigurelabel}[1]{(\emph{#1})}`

`@subfloatcapbox` Box to store subfloat caption.

217 `\newsavebox\@subfloatcapbox`

`subfloatcontsbox` Box to store subfloat contents.

218 `\newsavebox\@subfloatcontsbox`

`\subfigure`

219 `\newcommand*{\subfigure}[1] [] {%`

220 `\bgroup`

221 `\def\@subfigcap{#1}%`

222 `\@subfigure`

223 `}`

224 `\newcommand*{\@subfigure}[2][b] {%`

225 `\advance\c@figure by 1\relax`

226 `\refstepcounter{subfigure}%`

227 `\sbox\@subfloatcapbox{\subfigurelabel{\thesubfigure}}%`

228 `\ifx\@subfigcap\@empty`

229 `\else`

230 `\space\@subfigcap`

231 `\fi}%`

232 `\sbox\@subfloatcontsbox{#2}%`

233 `\settowidth{\@tempdima}{\usebox\@subfloatcontsbox}%`

234 `\settowidth{\@tempdimb}{\usebox\@subfloatcapbox}%`

235 `\ifdim\@tempdimb>\@tempdima`

236 `\settowidth\@tempdimb{\subfigurelabel{\thesubfigure}\space}%`

237 `\addtolength{\@tempdima}{-\@tempdimb}%`

238 `\sbox\@subfloatcapbox{\subfigurelabel{\thesubfigure}\space`

239 `\parbox[t]{\@tempdima}{\@subfigcap}}%`

240 `\fi`

241 `\begin{tabular}[#1]{@{}c@{}}%`

242 `\usebox\@subfloatcontsbox\\ \usebox\@subfloatcapbox`

243 `\end{tabular}%`

244 `\egroup`

245 `}`

Sub-tables:

`\c@subtable` Define subtable counter:

246 `\newcounter{subtable}`

247 `\@addtoreset{subtable}{table}`

`\thesubtable`

248 `\renewcommand*{\thesubtable}{\alph{subtable}}`



`\p@subtable`

```
249 \renewcommand*{\p@subtable}{\expandafter\@p@subtable}
250 \newcommand*{\@p@subtable}[1]{%
251   \protect\@subtablelabel{\thetable}{\thesubtable}%
252 }
```

As with `\@subfigure` we again need to check L<sup>A</sup>T<sub>E</sub>X kernel version.

```
253 \@ifl@t@r\fmtversion{2019/08/22}%
254 {
```

Newer kernel versions.

`\@subtablelabel` Define how label appears.

```
255 \newcommand*\@subtablelabel[3]{#1\subtablelabel{#2}}
```

`\@subtabref`

```
256 \newcommand*\@subtabref[1]{%
257   {%
258     \def\@subtablelabel##1##2##3{\subtablelabel{##2}}%
259     \ref{#1}%
260   }%
261 }
```

```
262 }%
```

```
263 {
```

Older kernel versions.

`\@subtablelabel` Define how label appears.

```
264 \newcommand*\@subtablelabel[2]{#1\subtablelabel{#2}}
```

`\@subtabref`

```
265 \newcommand*\@subtabref[1]{%
266   {%
267     \def\@subtablelabel##1##2{\subtablelabel{##2}}%
268     \ref{#1}%
269   }%
270 }
```

```
271 }%
```

`\subtabref` Reference the sub-table without including the table number.

```
272 \newcommand*\subtabref[1]{%
273   \let\@objectname\@empty
274   \def\@objectref{}%
275   \let\@prevsep\@empty
276   \@for\@thislabel:=#1\do{%
277     \toks@{\@prevsep}%
278     \protected@edef\@objectref{\@objectref\the\toks@
279       \protect\@subtabref{\@thislabel}}%
```

```

280     \ifx\@objectname\@empty
281 \let\@objectname\@nil
282     \else
283 \let\@objectname\relax
284     \let\@prevsep\@jmlr@reflistsep
285     \fi
286 }%
287 \ifx\@objectname\relax
288     \let\@prevsep\@jmlr@reflistlastsep
289 \fi
290 \@objectref
291 }

```

`\subtablelabel`

```

292 \newcommand*\subtablelabel}[1]{(\emph{#1})}

```

`\subtable`

```

293 \newcommand*\subtable}[1][t]{%
294   \def\@subtabcap{#1}%
295   \@subtable
296 }

297 \newcommand*\@subtable}[2][t]{%
298   \refstepcounter{subtable}%
299   \sbox\@subfloatcapbox{\subtablelabel{\thesubtable}}%
300   \ifx\@subtabcap\@empty
301     \else
302     \space\@subtabcap
303   \fi}%
304   \sbox\@subfloatcontsbox{#2}%
305   \settowidth{\@tempdima}{\usebox\@subfloatcontsbox}%
306   \settowidth{\@tempdimb}{\usebox\@subfloatcapbox}%
307   \ifdim\@tempdimb>\@tempdima
308     \settowidth\@tempdimb{\subtablelabel{\thesubtable}\space}%
309     \addtolength{\@tempdima}{-\@tempdimb}%
310     \sbox\@subfloatcapbox{\subtablelabel{\thesubtable}\space
311       \parbox[t]{\@tempdima}{\@subtabcap}}%
312   \fi
313   \begin{tabular}[#1]{@{}c@{}}%
314     \usebox\@subfloatcapbox\@usebox\@subfloatcontsbox
315   \end{tabular}
316 }

```

End of sub-floats.

```

317 \fi

```

### 4.1.3 General Markup

Provide maths command if required.

```

318 \ifjmlrutilsmaths

```

`\set`

```
319 \newcommand*{\set}[1]{\ensuremath{\mathcal{#1}}}
```

`\orgvec` Keep a copy of original `\vec` in case it's wanted.

```
320 \let\orgvec\vec
```

`\vec` Redefine `\vec` to produce a bold symbol. The `amsmath` package is required for this.

```
321 \renewcommand*{\vec}[1]{\boldsymbol{#1}}
```

End of maths commands.

```
322 \fi
```

`enumerate*` Define an `enumerate` style environment where the nested environments all use the same counter. It uses the `enumi` counter.

```
323 \newenvironment{enumerate*}%  
324 {%  
325   \ifnum\@enumdepth=0\relax  
326     \setcounter{enumi}{0}%  
327   \fi  
328   \ifnum\@enumdepth>\thr@@  
329     \@toodeep  
330   \else  
331     \advance\@enumdepth\@ne  
332     \def\@enumctr{enumi}%  
333     \list  
334       {\labelenumi}%  
335       {\@nmblisttrue\def\@listctr{enumi}%  
336         \def\makelabel##1{\hss\llap{##1}}}%  
337   \fi  
338 }%  
339 {\endlist}
```

`altdescription` Define a description like environment where the indent is computed from the widest label. The optional argument is the widest label.

```
340 \newenvironment{altdescription}[1]%  
341   {\list{}}%  
342   {%  
343     \settowidth{\labelwidth}{\altdescriptionlabel{#1}}%  
344     \setlength{\labelsep}{15pt}%  
345     \setlength{\leftmargin}{2\labelsep}%  
346     \addtolength{\leftmargin}{\labelwidth}%  
347     \setlength{\rightmargin}{\labelsep}%  
348     \let\makelabel\altdescriptionlabel  
349   }%  
350 }%  
351 {\endlist}  
352  
353 \newcommand*{\altdescriptionlabel}[1]{\normalfont\bfseries #1\hfill}
```

`\mailto` Syntax: `\mailto{<address>}`  
 354 `\newcommand*{\mailto}[1]{\texttt{#1}}`

#### 4.1.4 Proofs and Theorems

355 `\ifjmlrutilstheorems`

This code is taken from `jmlr2e.sty`

`\jmlrBlackBox` End of proof marker. This command was formerly called `\BlackBox` but has been renamed in case of a clash with symbol packages.

356 `\newcommand{\jmlrBlackBox}{\rule{1.5ex}{1.5ex}}`

`\BlackBox` Backward compatibility in case it was used explicitly.

357 `\providecommand{\BlackBox}{\jmlrBlackBox}`

`\jmlrQED`

358 `\newcommand{\jmlrQED}{\hfill\jmlrBlackBox\par\bigskip}`

`\proofname`

359 `\providecommand{\proofname}{Proof}`

`proof` Proof environment

360 `\newenvironment{proof}%`

361 `{%`

362 `\par\noindent{\bfseries\upshape \proofname\ }%`

363 `}%`

364 `{\jmlrQED}`

Since `theorem`, `ntheorem` and `amsthm` all cause problems with the `jmlr` and `jmlrbook` classes, this package provides a simple alternative.

`theorembodyfont`

`\theorembodyfont{<font declarations>}`

365 `\newcommand*{\theorembodyfont}[1]{%`

366 `\renewcommand*{\@theorembodyfont}{#1}%`

367 `}`

368 `\newcommand*{\@theorembodyfont}{\normalfont\itshape}%`

`theoremheaderfont`

`\theoremheaderfont{<font declarations>}`

369 `\newcommand*{\theoremheaderfont}[1]{%`

370 `\renewcommand*{\@theoremheaderfont}{#1}%`

371 `}`

372 `\newcommand*{\@theoremheaderfont}{\normalfont\bfseries }%`

`\theoremsep` `\theoremsep{<separation code>}`

```
373 \newcommand*\theoremsep[1]{%
374   \renewcommand*\@theoremsep{#1}%
375 }
376 \newcommand*\@theoremsep{}
```

`\theorempostheader` `\theorempostheader{<text>}`

```
377 \newcommand*\theorempostheader[1]{%
378   \renewcommand*\@theorempostheader{#1}%
379 }
380 \newcommand*\@theorempostheader{}
```

`\newtheorem`

```
381 \let\jmlr@org@newtheorem\newtheorem
382 \renewcommand*\newtheorem{\@ifstar\jmlr@snewtheorem\jmlr@newtheorem}
```

Define starred version:

`\newtheorem*{<env-name>}{<title tag>}`

```
383 \newcommand*\jmlr@snewtheorem[2]{%
384   \cslet{jmlr@thm@#1@body@font}{\@theorembodyfont}%
385   \cslet{jmlr@thm@#1@header@font}{\@theoremheaderfont}%
386   \cslet{jmlr@thm@#1@sep}{\@theoremsep}%
387   \cslet{jmlr@thm@#1@postheader}{\@theorempostheader}%
388   \newenvironment{#1}%
389   {%
390     \trivlist
391     \item
392     [%
393       \hskip\labelsep{\csuse{jmlr@thm@#1@header@font}#2%
394         \csuse{jmlr@thm@#1@postheader}%
395       ]%
396     ]%
397     \mbox{}{\csuse{jmlr@thm@#1@sep}%
398     \csuse{jmlr@thm@#1@body@font}%
399   }%
400   {%
401     \endtrivlist
402   }%
403 }
```

Unstarred version needs adjusting to take the style into account:

`\@othm`

```
404 \newcommand*\jmlr@newtheorem[1]{%
```

```

405 \cslet{jmlr@thm@#1@body@font}{\@theorembodyfont}%
406 \cslet{jmlr@thm@#1@header@font}{\@theoremheaderfont}%
407 \cslet{jmlr@thm@#1@sep}{\@theoremsep}%
408 \cslet{jmlr@thm@#1@postheader}{\@theorempostheader}%
409 \jmlr@org@newtheorem{#1}%
410 }

```

\@xthm

```

411 \renewcommand*{\@xthm}[2]{%
412 \def\@jmlr@currentthm{#1}%
413 \@begintheorem{#2}{\csname the#1\endcsname}%
414 \ignorespaces
415 }

```

\@ythm

```

416 \def\@ythm#1#2[#3]{%
417 \def\@jmlr@currentthm{#1}%
418 \@opargbegintheorem{#2}{\csname the#1\endcsname}{#3}%
419 \ignorespaces
420 }

```

\@begintheorem

```

421 \renewcommand*{\@begintheorem}[2]{%
422 \ifdef{\@jmlr@currentthm}%
423 {%
424 \letcs{jmlr@this@theoremheader}{jmlr@thm@\@jmlr@currentthm @header@font}%
425 \letcs{jmlr@this@theorembody}{jmlr@thm@\@jmlr@currentthm @body@font}%
426 \letcs{jmlr@this@theoremsep}{jmlr@thm@\@jmlr@currentthm @sep}%
427 \letcs{jmlr@this@theorempostheader}{%
428 {jmlr@thm@\@jmlr@currentthm @postheader}%
429 }%
430 {%
431 \let\jmlr@this@theorembody\@theorembodyfont
432 \let\jmlr@this@theoremheader\@theoremheaderfont
433 \let\jmlr@this@theoremsep\@theoremsep
434 \let\jmlr@this@theorempostheader\@theorempostheader
435 }%
436 \trivlist
437 \item
438 [%
439 \hskip\labelsep{jmlr@this@theoremheader #1\ #2%
440 \jmlr@this@theorempostheader}%
441 ]%
442 \mbox{}\jmlr@this@theoremsep
443 \jmlr@this@theorembody
444 }

```

argbegintheorem

```

445 \renewcommand*{\@opargbegintheorem}[3]{%

```

```

446 \ifdef{\@jmlr@currentthm}%
447 {%
448 \letcs{\jmlr@this@theoremheader}{jmlr@thm@\@jmlr@currentthm @header@font}%
449 \letcs{\jmlr@this@theorembody}{jmlr@thm@\@jmlr@currentthm @body@font}%
450 \letcs{\jmlr@this@theoremsep}{jmlr@thm@\@jmlr@currentthm @sep}%
451 \letcs{\jmlr@this@theoremheader}{jmlr@thm@\@jmlr@currentthm @postheader}%
452 {jmlr@thm@\@jmlr@currentthm @postheader}%
453 }%
454 {%
455 \let\jmlr@this@theorembody\@theorembodyfont
456 \let\jmlr@this@theoremheader\@theoremheaderfont
457 \let\jmlr@this@theoremsep\@theoremsep
458 \let\jmlr@this@theoremheader\@theoremheader
459 }%
460 \trivlist
461 \item[\hskip\labelsep{\jmlr@this@theoremheader #1\ #2\ (#3)%
462 \jmlr@this@theoremheader}]%
463 \mbox{\jmlr@this@theoremsep}
464 \jmlr@this@theorembody
465 }

```

example

```
466 \newtheorem{example}{Example}
```

theorem

```
467 \newtheorem{theorem}{Theorem}
```

lemma

```
468 \newtheorem{lemma}[theorem]{Lemma}
```

proposition

```
469 \newtheorem{proposition}[theorem]{Proposition}
```

remark

```
470 \newtheorem{remark}[theorem]{Remark}
```

corollary

```
471 \newtheorem{corollary}[theorem]{Corollary}
```

definition

```
472 \newtheorem{definition}[theorem]{Definition}
```

conjecture

```
473 \newtheorem{conjecture}[theorem]{Conjecture}
```

axiom

```
474 \newtheorem{axiom}[theorem]{Axiom}
```

End of theorem definitions.

```
475 \fi
```

## 4.2 jmlr.cls Code

This class is based on the jmlr2e package but was modified to make sure it works with jmlr-book which uses both combine and hyperref.

Declare class and required TeX format:

```
476 \NeedsTeXFormat{LaTeX2e}
477 \ProvidesClass{jmlr}[2020/09/21 v1.28 (NLCT) Journal of Machine Learning Research]
```

Need xkeyval package to have key=value class options

```
478 \RequirePackage{xkeyval}
```

```
479 \RequirePackage{calc}
```

```
480 \RequirePackage{etoolbox}
```

Some packages need to be loaded before hyperref so provide a hook to do this:

jmlrprehyperref

```
481 \providecommand*\jmlrprehyperref{}
```

The following conditionals are provided to make this class play nicely with combine and aren't required for articles.

```
482 \newif\if@openright
```

```
483 \newif\if@mainmatter \@mainmattertrue
```

\ifgrayscale Determine whether to select grayscale alternatives

```
484 \@ifundefined{ifgrayscale}{
```

```
485 \newif\ifgrayscale
```

```
486 \grayscalefalse
```

```
487 }{}
```

```
488 \DeclareOptionX{color}{\grayscalefalse
```

```
489 \PassOptionsToPackage{color}{xcolor}}
```

```
490 \DeclareOptionX{gray}{\grayscaletrue
```

```
491 \PassOptionsToPackage{gray}{xcolor}}
```

draft

```
492 \DeclareOptionX{draft}{\setlength\overfullrule{5pt}}
```

final

```
493 \DeclareOptionX{final}{\setlength\overfullrule{0pt}}
```

Can't load jmlrutils here but need the \iftablecaptiontop conditional for the class options.

tablecaptiontop

```
494 \newif\iftablecaptiontop
```

```
495 \tablecaptiontoptrue
```

Provide table contents command that uses this conditional. (The jmlrutils package doesn't use it.)



`\tablecnts`

```
496 \newcommand{\tablecnts}[3]{%
497   \iftablecaptiontop
498     #2\label{#1}\vskip\baselineskip
499     {\centering #3\par}%
500   \else
501     {\centering #3\par}%
502     \vskip\baselineskip
503     #2\label{#1}%
504   \fi
505 }
```

Determine if the table captions should go at the top.

`tablecaptiontop`

```
506 \DeclareOptionX{tablecaptiontop}{\tablecaptiontoptrue}
```

`tablecaptiontop`

```
507 \DeclareOptionX{tablecaptionbottom}{\tablecaptiontopfalse}
```

`tablecaption` Key=value interface.

```
508 \define@choicekey{jmlr.cls}{tablecaption}[\val\nr]{top,bottom}{%
509   \ifcase\nr\relax
510     \tablecaptiontoptrue
511   \or
512     \tablecaptiontopfalse
513   \fi
514 }
```

`\ifjmlrhtml` Determine if we are using TeX4ht. (Deprecated.) This option should no longer be used. The PMLR have changed the submission guidelines and the production editor should no longer supply HTML files.

```
515 \newif\ifjmlrhtml
516 \jmlrhtmlfalse
517 \DeclareOptionX{html}{%
518   \ClassWarning{jmlr}{html option is now deprecated}%
519   \jmlrhtmltrue}
520 \DeclareOptionX{nohtml}{\jmlrhtmlfalse}
```

Normal font size (default is 11pt).

```
521 \def\pt@size{11pt}
522 \DeclareOptionX{10pt}{\renewcommand{\pt@size}{10pt}}
523 \DeclareOptionX{11pt}{\renewcommand{\pt@size}{11pt}}
524 \DeclareOptionX{12pt}{\renewcommand{\pt@size}{12pt}}
```

`jmlrproceedings` The name of the proceedings.

```
525 \newcommand*{\@jmlrproceedings}{Journal of Machine Learning Research}
```

```

abbrvproceedings  The abbreviated name of the proceedings.
526 \newcommand*{\@jmlrabbrvproceedings}{JMLR}

jmlrproceedings  Sets the title and abbreviation of the proceedings
527 \newcommand*{\jmlrproceedings}[2]{%
528   \renewcommand*{\@jmlrabbrvproceedings}{#1}%
529   \renewcommand*{\@jmlrproceedings}{#2}%
530 }

\jmlrnowcp
531 \newcommand*{\jmlrnowcp}{%
532   \jmlrproceedings{JMLR}{Journal of Machine Learning Research}%
533 }

\jmlrwcp
534 \newcommand*{\jmlrwcp}{%
535   \jmlrproceedings{JMLR W&CP}{JMLR: Workshop and Conference Proceedings}%
536 }

\jmlrpmlr  The JMLR W&CP has been renamed PMLR, so provide code to switch to this instead,
537 \newcommand*{\jmlrpmlr}{%
538   \jmlrproceedings{PMLR}{Proceedings of Machine Learning Research}%
539 }

  This is a journal (non JMLR W&CP/PMLR) article:
540 \DeclareOptionX{nowcp}{\jmlrnowcp}
  This is an article for JMLR W&CP
541 \DeclareOptionX{wcp}{\jmlrwcp}
  This is an article for PMLR
542 \DeclareOptionX{pmlr}{\jmlrpmlr}

oneside
543 \DeclareOptionX{oneside}{\@twosidefalse \@mparswitchfalse}

twoside
544 \DeclareOptionX{twoside}{\@twosidetrue \@mparswitchtrue}

  Set two-sided format
545 \@twosidetrue
  The default paper size is letter, but provide 7 × 10in alternative:
546 \newif\ifviiXx
547 \viiXxfalse
548 \DeclareOptionX{7x10}{\viiXxtrue}
549 \DeclareOptionX{letterpaper}{\PassOptionsToPackage{letterpaper}{typearea}}

  Pass all remaining options to article class:
550 \DeclareOptionX*{\PassOptionsToClass{\CurrentOption}{article}}

```

Execute required options:

```
551 \ExecuteOptions{letterpaper}
```

Process options:

```
552 \ProcessOptionsX
```

If two-sided, pass that to article as well:

```
553 \if@twoside
```

```
554 \PassOptionsToClass{twoside}{article}
```

```
555 \fi
```

Load article class.

```
556 \LoadClass[\pt@size]{article}
```

Can't use geometry package because it doesn't play nicely with the combine class.

```
557 \ifviiXx
```

```
558 \setlength{\paperwidth}{7in}
```

```
559 \setlength{\paperheight}{10in}
```

```
560 \setlength{\textwidth}{5.25in}
```

```
561 \setlength{\textheight}{8.2in}
```

```
562 \setlength{\topmargin}{0.4in}
```

```
563 \setlength{\headheight}{0.2in}
```

```
564 \setlength{\headsep}{0.2in}
```

```
565 \setlength{\hoffset}{-1in}
```

```
566 \setlength{\voffset}{-1in}
```

```
567 \setlength{\evensidemargin}{0.75in}
```

```
568 \setlength{\oddsidemargin}{1.0in}
```

```
569 \else
```

```
570 \setlength{\oddsidemargin}{0.25in}
```

```
571 \setlength{\evensidemargin}{0.25in}
```

```
572 \setlength{\marginparwidth}{0.07 true in}
```

```
573 \setlength{\topmargin}{-0.5in}
```

```
574 \addtolength{\headsep}{0.25in}
```

```
575 \setlength{\textheight}{8.5 true in}
```

```
576 \setlength{\textwidth}{6.0 true in}
```

```
577 \fi
```

Need to add jmlr end document hook before natbib adds a `\clearpage` to it.

```
578 \AtEndDocument{\@jmlrenddoc}
```

Required packages:

```
579 \RequirePackage{amsmath}
```

```
580 \RequirePackage{amssymb}
```

```
581 \RequirePackage{natbib}
```

```
582 \RequirePackage{graphicx}
```

```
583 \RequirePackage{url}
```

```
584 \PassOptionsToPackage{x11names}{xcolor}
```

```
585 \RequirePackage{xcolor}
```

Allow old command names in the event that the proceedings contains a mixture of papers that use old and new versions. (This means that editors need to install the newer version.)

For some reason, loading `algorithm2e` causes the message

(\end occurred inside a group at level 1)

I don't know why, but it's outside the control of this class.

```
586 \PassOptionsToPackage{algo2e,ruled}{algorithm2e}
587 \RequirePackage{algorithm2e}
```

Set the algorithm margin to zero.

```
588 \setlength\algomargin{0pt}
```

Load jmlrutils before hyperref.

```
589 \RequirePackage{jmlrutils}
```

Do all the stuff that needs to be done before hyperref is loaded:

```
590 \jmlrprehyperref
```

Do stuff that has to come immediately before hyperref is loaded:

```
591 \ifundefined{@pre@hyperref}{}{\@pre@hyperref}
```

Load hyperref:

```
592 \RequirePackage{hyperref}
```

```
593 \RequirePackage{nameref}
```

```
594 % Do stuff that has to come immediately after \sty{hyperref} and
595 % \sty{nameref} are loaded:
```

```
596 %\changes{1.16}{2012/05/15}{added \cs{@post@hyperref}}
```

```
597 \ifundefined{@post@hyperref}{}{\@post@hyperref}
```

Set up hyperref options:

```
598 \hypersetup{colorlinks,
599             linkcolor=blue,
600             citecolor=blue,
601             urlcolor=magenta,
602             linktocpage,
603             plainpages=false}
```

```
604 \ifgrayscale
```

If this is the print version, need to disable the hyperlinks:

```
605 \hypersetup{draft}
```

```
606 \fi
```

Float parameters: the following settings were copied from jmlr2e.sty

```
607 \renewcommand{\topfraction}{0.95} % let figure take up nearly whole page
```

```
608 \renewcommand{\textfraction}{0.05} % let figure take up nearly whole page
```

widows/orphans

```
609 \widowpenalty=10000\relax
```

```
610 \clubpenalty=10000\relax
```

Put marginal notes on the outside of the page

```
611 \@mparswitchtrue
```

Use the plainnat bibliography style and set up the required punctuation.

```
612 \bibliographystyle{plainnat}
```

```
613 \bibpunct{(}{)}{;}{a}{,}{,}
```

## 4.2.1 Sections

`\section`

```
614 \renewcommand{\section}{\@startsection{section}{1}{\z@}%
615   {-0.24in \@plus -1ex \@minus -.2ex}%
616   {0.10in \@plus .2ex}%
617   {\normalfont\rmfamily\bfseries\large\raggedright}%
618 }
```

`\subsection`

```
619 \renewcommand\subsection{\@startsection{subsection}{2}{\z@}%
620   {-0.20in \@plus -1ex \@minus -.2ex}%
621   {0.08in \@plus .2ex}%
622   {\normalfont\rmfamily\bfseries\normalsize\raggedright}%
623 }
```

`\subsubsection`

```
624 \renewcommand\subsubsection{\@startsection{subsubsection}{3}{\z@}%
625   {-0.18in \@plus -1ex \@minus -.2ex}%
626   {0.08in \@plus .2ex}%
627   {\normalfont\normalsize\rmfamily\mdseries\scshape\raggedright}%
628 }
```

`\paragraph`

```
629 \renewcommand\paragraph{\@startsection{paragraph}{4}{\z@}%
630   {1.5ex plus 0.5ex minus .2ex}%
631   {-1em}%
632   {\normalfont\normalsize\rmfamily\bfseries}%
633 }
```

`\subparagraph`

```
634 \renewcommand\subparagraph{\@startsection{subparagraph}{5}{\z@}%
635   {1.5ex plus 0.5ex minus .2ex}%
636   {-1em}%
637   {\normalfont\normalsize\rmfamily\bfseries\itshape}}
```

`\@secntformat` Redefine the way the section number appears in the section heading.

```
638 \renewcommand*\@secntformat[1]{%
639   \csname pre#1num\endcsname
640   \csname the#1\endcsname.\enskip
641 }
```

## 4.2.2 Footnotes

`\@makefnctext` Redefine `\@makefnctext` so that the text between the footnote symbol and the footnote text can be redefined. (It looks odd having a full stop after a symbol.)

```
642 \renewcommand*\@makefnctext[1]{%
643   \@setpar
```

```

644 {%
645   \@par
646   \@tempdima\hsize
647   \advance \@tempdima -15pt\relax
648   \parshape \@ne 15pt \@tempdima
649 }%
650 \par
651 \parindent 2em\noindent
652 \hbox to \z@ {\hss {\@thefnmark }\footnoteseptext\hfil }#1%
653 }

```

footnoteseptext The separation text between the footnote symbol and the footnote text.

```
654 \newcommand*{\footnoteseptext}{. }
```

\thanks Added optional argument to \footnotetext as per <http://tex.stackexchange.com/questions/229295>.

```

655 \renewcommand*{\thanks}[1]{%
656   \refstepcounter{mpfootnote}%
657   \footnotemark[\number\value{mpfootnote}]%
658   \xappto@thanks{\noexpand\footnotetext[\number\value{mpfootnote}]{#1}}%
659 }

```

### 4.2.3 Article abstract

This code has been taken from jmlr2e.sty but with \bf updated to \bfseries

abstract

```

660 \ifjmlrhtml
661   \renewenvironment{abstract}{\HCode{<h3>}Abstract\HCode{</h3>}}{}%
662 \else
663   \renewenvironment{abstract}
664     {{{\centering\large\bfseries Abstract\par}\vspace{0.7ex}%
665       \bgroup
666         \leftskip 20pt\rightskip 20pt\small\noindent\ignorespaces}%
667     {\par\egroup\vskip 0.25ex}
668 \fi

```

### 4.2.4 Keywords

This code has been taken from jmlr2e.sty but with \bf updated to \bfseries.

keywords

```

669 \newenvironment{keywords}
670 {\bgroup\leftskip 20pt\rightskip 20pt \small\noindent{\bfseries
671 Keywords:} \ignorespaces}%
672 {\par\egroup\vskip 0.25ex}

```

## 4.2.5 Title Page Information

This code has been taken from `jmlr2e.sty`.

Title stuff, borrowed in part from `aaai92.sty`

```
673 \newlength\aftertitskip      \newlength\beforetitskip
674 \newlength\interauthorskip  \newlength\aftermaketitskip
```

Changeable parameters.

```
675 \setlength\aftertitskip{0.1in plus 0.2in minus 0.2in}
676 \setlength\beforetitskip{0.05in plus 0.08in minus 0.08in}
677 \setlength\interauthorskip{0.08in plus 0.1in minus 0.1in}
678 \setlength\aftermaketitskip{0.3in plus 0.1in minus 0.1in}
```

`\titlebreak` Acts like new line in the paper title, but with `jmlrbook` acts like a space in the table of contents and bookmarks.

```
679 \newcommand*\titlebreak}{\newline}
```

`\titletag`

```
680 \newcommand*\titletag}[1]{}
```

`\title` Override definition of `\title` to allow for an optional argument (short title)

```
681 \renewcommand*\title}[2][\@title]{%
682   \def\@shorttitle{#1}%
683   \def\@title{#2}%
684   \protected@write\@auxout{}{\string\jmlr@title{#1}{#2}}%
685   \jmlrtitlehook
686 }
```

`\@shorttitle` The short title of the document is initialised to `\jobname` to ensure a basic document will compile even if no title is set.

```
687 \newcommand*\@shorttitle{\jobname}
```

`\jmlrtitlehook`

```
688 \newcommand*\jmlrtitlehook{}
```

`\jmlr@title` AUX command provided for `MakeJmlrBookGUI`

```
689 \newcommand*\jmlr@title}[2]{}
```

`\author` Override definition of `\author` to allow for an optional argument (list of authors for page heading)

```
690 \renewcommand*\author}[2][{}]{%
691   \def\@author{#2}%
692   \def\@sauthor{#1}%
693   \def\@jmlr@aux@author{#2}\@onelevel@sanitize\@jmlr@aux@author
694   \ifx\@sauthor\@empty
695     \let\@jmlr@aux@sauthor\@jmlr@aux@author
696   \else
697     \let\@shortauthor\@sauthor
```

```

698   \def\@jmlr@aux@sauthor{#1}\@onelevel@sanitize\@jmlr@aux@sauthor
699   \fi
700   \jmlrauthorhook
701   \protected@write\@auxout
702   {}{\string\jmlr@author{\@jmlr@aux@sauthor}{\@jmlr@aux@author}}%
703 }

```

\jmlrauthorhook

```
704 \newcommand*\@jmlrauthorhook{}
```

\jmlr@author AUX command provided for MakeJmlrBookGUI

```
705 \newcommand*\@jmlr@author[2]{}
```

\@shortauthor

```
706 \newcommand*\@shortauthor{}
```

\@firstauthor

```
707 \newcommand*\@firstauthor{}
```

\@firstsurname

```
708 \newcommand*\@firstsurname{}
```

\jmlrlength

```
709 \newlength\jmlrlength
```

\jmlrmaketitle Make the title

```

710 \def\jmlrmaketitle{%
711   \jmlrpremaketitlehook
712   \def\@jmlr@authors@sep{, }%
713   \par
714   \begingroup

715   \def\footnoteseptext{ }%
716   \def\thempfn{\textsuperscript{\thefootnote}}%
717   \def\thefootnote{\fnsymbol{footnote}}%

718   \if@twocolumn
719     \twocolumn[\@jmlrmaketitle]%
720   \else
721     \@jmlrmaketitle
722   \fi
723   \@thanks
724 \endgroup
725 \label{jmlrstart}%
726 \ifx\@sauthor\@empty
727   \settowidth{\jmlrlength}{\@evenhead}%
728   \ifdim\jmlrlength>\textwidth
729     \def\@shortauthor{\@firstsurname\space et al.}%

```



```

730 \fi
731 \fi
732 \settowidth{\jmlrlength}{\@titlefoot}%
733 \ifdim\jmlrlength>\textwidth
734 \def\@jmlrauthors{\@firstauthor\space \emph{et al}}%
735 \fi
736 \jmlrmaketitlehook
737 \thispagestyle{jmlrtps}%
738 \setcounter{footnote}{0}%
739 \let\maketitle\relax \let\@maketitle\relax
740 \gdef\@thanks{}\gdef\@author{}\let\thanks\@gobble
741 \def\@jmlr@authors@sep{ \& }%
742 }

```

lrmaketitlehook

```
743 \newcommand*\jmlrmaketitlehook{}
```

remaketitlehook

```
744 \newcommand*\jmlrpremaketitlehook{}
```

Provide a different title layout for HTML

lrhtmlmaketitle

```

745 \newcommand{\jmlrhtmlmaketitle}{%
746 \ifx\@jmlr@authors\@empty
747 \sbox\jmlrbox{\let\addr\relax\@author}%
748 \fi
749 \noindent\HCode{<h2>}\@title\HCode{</h2>}
750 \noindent\@jmlr@authors
751 }

```

\jmlrbox Define a save box

```
752 \newsavebox\jmlrbox
```

\maketitle If we're creating HTML, set \maketitle to \jmlrhtmlmaketitle, otherwise set it to \jmlrmaketitle

```

753 \ifjmlrhtml
754 \let\maketitle\jmlrhtmlmaketitle
755 \else
756 \let\maketitle\jmlrmaketitle
757 \fi

```

Author and editor information.

```

758 \def\@startauthor{\noindent \normalsize\bfseries}
759 \def\@endauthor{}
760 \def\@starteditor{\noindent \small {\bfseries \@edname:~}}
761 \def\@endeditor{\normalsize}

```

Provide hooks to make it easier to adapted with combine class.

```

\jmlrprettitle
762 \def\jmlrprettitle{\vskip\beforetitskip\begin{center}\Large\bfseries}

\jmlrposttitle
763 \def\jmlrposttitle{\par\end{center}\vskip\aftertitskip}

\nametag
764 \newcommand*{\nametag}[1]{

\jmlrpreauthor
765 \def\jmlrpreauthor{%
766 \bgroup
767 \def\nametag##1{##1}%
768 \def\and{\unskip\enspace{\normalfont and}\enspace}%

769 \def\addr{\mdseries\small\itshape}%
770 \def\name{\ClassError{jmlr}{Use \string\Name{Author's Name} not \string\name}{}}%
771 \def\email{\ClassError{jmlr}{Use \string\Email{address} not \string\email}{}}%
772 \def\AND{@endauthor\normalfont\hss \vskip \interauthorskip
773 \startauthor}%
774 \@startauthor
775 }

\addr Initialise to do nothing if used outside of \author
776 \newcommand{\addr}{}

\@email
777 \def\@email{\hfill\small\mdseries\scshape}%

\@name
778 \def\@name{\normalsize\upshape\bfseries}%

\@parsename Parse a name. Appends forename to \@forenames and stores surname in \@surname.
779 \def\@parsename#1 #2\end@parsename{%
780 \def\@tmp{#2}%
781 \ifx\@tmp\@nnil
782 \def\@surname{#1}%
783 \let\@nextparsename\@parsenamenoop
784 \else
785 \@getinitial#1-\relax\relax\end@getinitial
786 \ifx\@forenames\@empty
787 \def\@forenames{#1}%
788 \protected@edef\@initials{\@initial}%
789 \else
790 \expandafter\toks@\expandafter{\@forenames}%
791 \edef\@forenames{\space\the\toks@}%
792 \expandafter\toks@\expandafter{\@initials}%
793 \protected@edef\@initials{\the\toks@\@initial}%

```

```

794   \fi
795   \let\@nextparsename\@parsename
796 \fi
797 \@nextparsename#2\end@parsename
798 }
799 \def\@parsenamenoop#1\end@parsename{}

```

\@getinitial

```

800 \def\@getinitial#1#2-#3#4\end@getinitial{%
801   \def\@jmlr@tmp{#3}%
802   \if\@jmlr@tmp\relax
803     \def\@initial{#1.}%
804   \else
805     \def\@initial{#1.-#3.}%
806   \fi
807 }

```

\Name Get the author's name and add surname to \@shortauthors. (Surnames with “von” parts or with spaces in should be enclosed in braces)

```

808 \newcommand*{\Name}[2][ ]{%
809   \def\@authorlist{#1}%
810   \def\@forenames{}%
811   \def\@surname{}%
812   \def\@nametag##1{%
813     \@parsename#2 \@nil\end@parsename
814   \ifx\@shortauthor\@empty
815     \ifx\@sauthor\@empty
816       \global\let\@shortauthor\@surname
817       \global\let\@firstsurname\@surname
818     \fi
819     \ifx\@authorlist\@empty
820       \protected@xdef\@jmlrauthors{\@initials\space\@surname}%
821     \else
822       \protected@xdef\@jmlrauthors{\@authorlist}%
823     \fi
824     \global\let\@firstauthor\@jmlrauthors
825   \else
826     \ifx\@sauthor\@empty
827       \expandafter\toks@expandafter{\@shortauthor}%
828       \protected@xdef\@shortauthor{\the\toks@\space\@surname}%
829     \fi
830     \ifx\@authorlist\@empty
831       \ifx\@jmlrauthors\@empty
832         \protected@xdef\@jmlrauthors{\@initials\space\@surname}%
833       \else
834         \protected@xdef\@jmlrauthors{\@jmlrauthors
835           \noexpand\@jmlr@authors@sep
836           \@initials\space\@surname}%
837     \fi

```

```

838 \else
839 \ifx\@jmlrauthors\@empty
840 \protected@xdef\@jmlrauthors{\@authorlist}%
841 \else
842 \protected@xdef\@jmlrauthors{\@jmlrauthors
843 \noexpand\@jmlr@authors@sep
844 \@authorlist
845 }%
846 \fi
847 \fi
848 \fi
849 \def\nametag##1{##1}%
850 \@name #2%
851 }

```

`\jmlrabbrnamelist` Display list of names in abbreviated form. (Mainly designed for use with `makejmlrbook` for the preface authors.) The author should be grouped if the name contains a comma.

```

852 \newcommand*\@jmlrabbrnamelist}[1]{%
853 \def\nametag##1{%
854 \def\@jmlr@authors@sep{, }%
855 \def\@jmlr@namelist{%
856 \@for\@thisname:=#1\do{%
857 \expandafter\@jmlrabbrname\expandafter{\@thisname}%
858 \ifx\@jmlr@namelist\@empty
859 \protected@edef\@jmlr@namelist{%
860 \@initials\space\@surname
861 }%
862 \else
863 \protected@edef\@jmlr@namelist{%
864 \@jmlr@namelist
865 \noexpand\@jmlr@authors@sep
866 \@initials\space\@surname
867 }%
868 \fi
869 }%
870 \def\@jmlr@authors@sep{ \& }%
871 \@jmlr@namelist
872 }

```

`\@jmlrabbrname`

```

873 \newcommand*\@jmlrabbrname}[1]{%
874 \def\@initials{%
875 \def\@surname{%
876 \def\@forenames{%
877 \@parsename#1 \@nil\end@parsename
878 }

```

`\Email`

```

879 \newcommand*\Email}[1]{\@email #1}

```

`\jmlrpostauthor`

```
880 \def\jmlrpostauthor{\@endauthor\egroup
881 \par
882 \vskip \aftermaketitskip
883 \noindent
884 \ifx\@editor\@empty
885 \else
886 \@starteditor \@editor \@endeditor
887 \fi
888 \vskip \aftermaketitskip
889 }
```

`\@jmlrmaketitle` This used to enclose the title in a `\vbox` but this caused a problem for extremely long author/affiliation lists that spanned multiple pages, so the `\vbox` has been removed (in v1.26), but the grouping has been retained.

```
890 \def\@jmlrmaketitle{%
891 {%
892 \jmlrprettitle
893 {%
894 \def\titletag##1{##1}%
895 \@title
896 }%
897 \jmlrposttitle
```

Use `\ignorespaces` before `\@author` in case a space has been inserted at the start of `\author`. May occur with a long author list that's been spaced for clarity, but less likely to occur with `\title`. Trailing spaces are less likely to be noticeable.

```
898 \jmlrpreauthor \ignorespaces\@author \jmlrpostauthor
899 }%
900 }
```

`\kernelmachines` Convenience command

```
901 \newcommand*\kernelmachines{(for
902 {\textsc{http://www.kernel-machines.org}})}
```

`\editorname` Label for the editor

```
903 \newcommand*{\editorname}{Editor}
```

`\editorsname` Label for the editor

```
904 \newcommand*{\editorsname}{Editors}
```

`\@edname` This will either be Editor or Editors depending on whether `\editor` or `\editors` is used. Defaults to `\editorname`

```
905 \let\@edname\editorname
```

`\@editor` The editor or editors are stored in `\@editor`

```
906 \def\@editor{}
```

```

\editor A single editor
907 \def\editor#1{%
908 \global\let\@edname\editorname
909 \gdef\@editor{#1}%
910 }

```

```

\editors Multiple editors
911 \def\editors#1{%
912 \global\let\@edname\editorsname
913 \gdef\@editor{#1}%
914 }

```

## 4.2.6 Pagestyles

This is taken from jmlr2e.sty

```

\firstpageno Set the page counter.
915 \def\firstpageno#1{\setcounter{page}{#1}}

\startpage If \startpage has been defined, use its value for the first page.
916 \@ifundefined{startpage}{}{\firstpageno{\startpage}}

```

Label end page.

```

\@jmlrenddoc Label end page
917 \newcommand*\@jmlrenddoc{%
918 \phantomsection
919 \protected@edef\@currentlabelname{end of \@shorttitle}%
920 \label{jmlrend}\null
921 \global\let\@reprint\@empty
922 }

```

```

\@titlefoot
923 \newcommand*\@titlefoot{\scriptsize\copyright\space\@jmlryear
924 \space\@jmlr@authors.\hfill
925 \@reprint
926 }

```

```

\reprint
927 \let\@reprint\@empty
928 \newcommand{\reprint}[1]{%
929 \gdef\@reprint{Reprinted with permission for JMLR#1}}

```

```

\ps@jmlrtps Title page style
930 \newcommand\ps@jmlrtps{%
931 \let\@mkboth\@gobbletwo
932 \def\@oddhead{\scriptsize \@jmlrproceedings
933 \ifx\@jmlrvolume\@empty

```

```

934 \else
935 \space\@jmlrvolume
936 \ifx\@jmlrissue\@empty\else(\@jmlrissue)\fi
937 \ifx\@jmlrpages\@empty
938 \ifx\@jmlryear\@empty
939 \else
940 \if\@jmlrissue\@empty,\fi
941 \fi
942 \else
943 :%
944 \fi
945 \fi
946 \ifx\@jmlrpages\@empty
947 \else
948 \ifx\@jmlrvolume\@empty\space\fi
949 \@jmlrpages
950 \ifx\@jmlryear\@empty\else,\fi
951 \fi
952 \ifx\@jmlryear\@empty\else\space\@jmlryear\fi
953 \hfill
954 \ifx\@jmlrworkshop\@empty
955 \ifx\@jmlrsubmitted\@empty
956 \else
957 Submitted \@jmlrsubmitted
958 \ifx\@jmlrpublished\@empty\else;\fi
959 \fi
960 \ifx\@jmlrpublished\@empty
961 \else
962 \space Published \@jmlrpublished
963 \fi
964 \else
965 \space\@jmlrworkshop
966 \fi
967 }%
968 \let\@evenhead\@oddhead
969 \def\@oddfoot{\@titlefoot}%
970 \let\@evenfoot\@oddfoot
971 }

```

\ps@jmlrps Page style for subsequent pages

```

972 \def\ps@jmlrps{%
973 \let\@mkboth\@gobbletwo
974 \def\@oddhead{\hfill {\small\scshape \@shorttitle} \hfill}%
975 \def\@oddfoot{\hfill \small\rmfamily \thepage \hfill}%
976 \def\@evenhead{\hfill {\small\scshape \@shortauthor} \hfill}%
977 \def\@evenfoot{\hfill \small\rmfamily \thepage \hfill}%
978 }%

```

Set the page style:

```

979 \pagestyle{jmlrps}

```

Set the heading information:

```
\@jmlrvolume The volume number:
980 \providecommand*\@jmlrvolume{}

\jmlrvolume
981 \newcommand*\@jmlrvolume}[1]{\renewcommand*\@jmlrvolume{#1}}

\@jmlrissue The issue number:
982 \providecommand*\@jmlrissue{}

\jmlrissue
983 \newcommand*\@jmlrissue}[1]{\renewcommand*\@jmlrissue{#1}}

\@jmlryear The year of publication:
984 \providecommand*\@jmlryear{}

\jmlryear
985 \newcommand*\@jmlryear}[1]{\renewcommand*\@jmlryear{#1}}

\@jmlrpages The page range:
986 \providecommand*\@jmlrpages{\pageref{jmlrstart}--\pageref{jmlrend}}

\jmlrpages
987 \newcommand*\@jmlrpages}[1]{\renewcommand*\@jmlrpages{#1}}

\@jmlrsubmitted The date the article was submitted:
988 \providecommand*\@jmlrsubmitted{}

\jmlrsubmitted
989 \newcommand*\@jmlrsubmitted}[1]{\renewcommand*\@jmlrsubmitted{#1}}

\@jmlrpublished The date the article was published:
990 \providecommand*\@jmlrpublished{}

\jmlrpublished
991 \newcommand*\@jmlrpublished}[1]{\renewcommand*\@jmlrpublished{#1}}

\@jmlrworkshop The name of the workshop:
992 \providecommand*\@jmlrworkshop{}

\jmlrworkshop
993 \newcommand*\@jmlrworkshop}[1]{%
994 \renewcommand*\@jmlrworkshop{#1}%
995 \protected@write\@auxout{}\@string\@jmlr@workshop{#1}}%
996 }
```



\jmlr@workshop

```
997 \newcommand*{\jmlr@workshop}[1]{}

\date
```

```
998 \renewcommand*{\date}[1]{%
999 \renewcommand*{\@date}{#1}%
1000 \protected@write\@auxout{}{\string\jmlr@date{#1}}%
1001 }
```

\jmlr@date

```
1002 \newcommand*{\jmlr@date}[1]{}

\@jmlrauthors
```

```
1003 \newcommand*{\@jmlrauthors}{}

\@jmlr@authors
```

```
1004 \newcommand*{\@jmlr@authors}{\@jmlrauthors}

\jmlrauthors This is provided in case \Name doesn't set \@jmlrauthors correctly.
```

```
1005 \newcommand*{\jmlrauthors}[1]{\global\def\@jmlr@authors{#1}}
```

## 4.2.7 Miscellany

This code was taken from jmlr2e.sty.

Define macros for figure captions and table titles

```
1006 \def\figurecaption#1#2{\noindent\hangindent 40pt
1007 \hbox to 36pt {\small\slshape #1 \hfil}
1008 \ignorespaces {\small #2}}
```

Figurecenter prints the caption title centered.

```
1009 \def\figurecenter#1#2{\centerline{{\slshape #1} #2}}
1010 \def\figurecenter#1#2{\centerline{{\small\slshape #1} {\small #2}}}
```

Allow “hanging indents” in long captions

\@makecaption

```
1011 \long\def\@makecaption#1#2{%
1012 \vskip 10pt
1013 \setbox\@tempboxa\hbox{#1: #2}%
1014 \ifdim \wd\@tempboxa >\hsize % IF longer than one line:
1015 \begin{list}{#1:}{%
1016 \settowidth{\labelwidth}{#1:}
1017 \setlength{\leftmargin}{\labelwidth}
1018 \addtolength{\leftmargin}{\labelsep}
1019 }\item #2 \end{list}\par % Output in quote mode
1020 \else % ELSE center.
1021 \hbox to\hsize{\hfil\box\@tempboxa\hfil}
1022 \fi}
```

Define strut macros for skipping spaces above and below text in a tabular environment.

```
1023 \def\abovestrut#1{\rule[0in]{0in}{#1}\ignorespaces}
1024 \def\belowstrut#1{\rule[-#1]{0in}{#1}\ignorespaces}
```

`\acks` Acknowledgements

```
1025 \newcommand{\acks}[1]{\section*{Acknowledgments}#1}
```

Research Note

`\researchnote`

```
1026 \newcommand{\researchnote}[1]{\noindent {\LARGE\itshape Research Note} #1}
```

Other macros now moved to `jmlrutils`.

`\ifprint` Provide command to check if this is the printed greyscale version or the online colour version.

```
1027 \providecommand{\ifprint}[2]{\ifgrayscale#1\else#2\fi}
```

Modify `\includegraphics` so that it can pick up the greyscale version of images if this is the print version. (Extension shouldn't be specified.)

```
1028 \ifjmlrhtml
1029 \else
1030 \let\@org@Gininclude@graphics\Gininclude@graphics
```

Since graphics 2019/07/01, the file name parsing has changed to allow for UTF-8 characters. So provide patches for the old and new versions and work out which one to use.

`\includegraphics` This is a patched version of the old `\Gininclude@graphics`.

```
1031 \def\@jmlr@old@Gininclude@graphics#1{%
1032   \begingroup
1033   \let\input@path\Gininput@path
1034   \ifprint{\filename@parse{#1-gray}}{\filename@parse{#1}}%
1035   \ifx\filename@ext\relax
1036     \@for\Gin@temp:=\Gin@extensions\do{%
1037       \ifx\Gin@ext\relax
1038         \Gin@getbase\Gin@temp
1039       \fi}%
1040   \else
1041     \ifprint{\filename@parse{#1}}{%
1042       \Gin@getbase{\Gin@sepdefault\filename@ext}%
1043     \ifx\Gin@ext\relax
1044       \@warning{File '#1' not found}%
1045       \def\Gin@base{\filename@area\filename@base}%
1046       \edef\Gin@ext{\Gin@sepdefault\filename@ext}%
1047     \fi
1048   \fi
1049   \ifx\Gin@ext\relax
1050     \ifprint{\@org@Gininclude@graphics{#1}}%
1051     {%
1052       \@latex@error{File '#1' not found}%
```

```

1053         {I could not locate the file with any of these extensions:^^J%
1054         \Gin@extensions^^J\@ehc}%
1055     }%
1056 \else
1057     \ifundefined{Gin@rule@\Gin@ext}%
1058     {\ifx\Gin@rule@*\@undefined
1059     \latex@error{Unknown graphics extension: \Gin@ext}\@ehc
1060     \else
1061     \expandafter\Gin@setfile\Gin@rule*{\Gin@base\Gin@ext}%
1062     \fi}%
1063     {\expandafter\expandafter\expandafter\Gin@setfile
1064     \csname Gin@rule@\Gin@ext\endcsname{\Gin@base\Gin@ext}}%
1065 \fi
1066 \endgroup}

```

include@graphics This is a patch of the new version.

```

1067 \def\@jmlr@new@Gin@include@graphics#1{%
1068 \ifx\detokenize\@undefined\else
1069 \edef\Gin@extensions{\detokenize\expandafter{\Gin@extensions}}%
1070 \fi
1071 \begingroup
1072 \let\input@path\Gin@input@path
1073 \ifprint{\set@curr@file{#1-gray}}{\set@curr@file{#1}}%
1074 \expandafter\filename@parse\expandafter{\@curr@file}%
1075 \ifx\filename@ext\Gin@gzext
1076 \expandafter\filename@parse\expandafter{\filename@base}%
1077 \ifx\filename@ext\relax
1078 \let\filename@ext\Gin@gzext
1079 \else
1080 \edef\Gin@ext{\Gin@ext\Gin@sepdefault\Gin@gzext}%
1081 \fi
1082 \fi
1083 \let\@jmlr@filename@ext\filename@ext
1084 \ifx\filename@ext\relax
1085 \@for\Gin@temp:=\Gin@extensions\do{%
1086 \ifx\Gin@ext\relax
1087 \Gin@getbase\Gin@temp
1088 \fi}%
1089 \ifprint
1090 {\ifx\Gin@ext\relax
1091 \set@curr@file{#1}%
1092 \expandafter\filename@parse\expandafter{\@curr@file}%
1093 \ifx\filename@ext\Gin@gzext
1094 \expandafter\filename@parse\expandafter{\filename@base}%
1095 \ifx\filename@ext\relax
1096 \let\filename@ext\Gin@gzext
1097 \else
1098 \edef\Gin@ext{\Gin@ext\Gin@sepdefault\Gin@gzext}%
1099 \fi

```

```

1100     \fi
1101     \let\@jmlr@filename@ext\filename@ext
1102     \ifx\filename@ext\relax
1103     \@for\Gin@temp:=\Gin@extensions\do{%
1104         \ifx\Gin@ext\relax
1105             \Gin@getbase\Gin@temp
1106         \fi}%
1107     \fi
1108 \fi}{}%
1109 \fi
1110 \ifx\@jmlr@filename@ext\relax
1111 \else
1112     \Gin@getbase{\Gin@sepdefault\filename@ext}%
1113     \ifx\Gin@ext\relax
1114         \let\Gin@savabase\filename@base
1115         \let\Gin@savext\filename@ext
1116         \edef\filename@base{\filename@base\Gin@sepdefault\filename@ext}%
1117         \let\filename@ext\relax
1118         \@for\Gin@temp:=\Gin@extensions\do{%
1119             \ifx\Gin@ext\relax
1120                 \Gin@getbase\Gin@temp
1121             \fi}%
1122             \ifx\Gin@ext\relax
1123                 \let\filename@base\Gin@savabase
1124                 \let\filename@ext\Gin@savext
1125             \fi
1126         \fi
1127         \ifx\Gin@ext\relax
1128             \@warning{File '#1' not found}%
1129             \def\Gin@base{\filename@area\filename@base}%
1130             \edef\Gin@ext{\Gin@sepdefault\filename@ext}%
1131         \fi
1132     \fi
1133     \ifx\Gin@ext\relax
1134         \@latex@error{File '#1' not found}%
1135         {I could not locate the file with any of these extensions:^^J%
1136         \Gin@extensions^^J\@ehc}%
1137     \else
1138         \@ifundefined{Gin@rule@\Gin@ext}%
1139         {\ifx\Gin@rule@\@undefined
1140             \@latex@error{Unknown graphics extension: \Gin@ext}\@ehc
1141             \else
1142                 \expandafter\Gin@setfile\Gin@rule*{\Gin@base\Gin@ext}%
1143             \fi}%
1144         {\expandafter\expandafter\expandafter\Gin@setfile
1145         \csname Gin@rule@\Gin@ext\endcsname{\Gin@base\Gin@ext}}%
1146     \fi
1147 \endgroup
1148 }

```

Determine which one to use:

```
1149 \ifpackagelater{graphics}{2019/07/01}
1150 {\let\Ginclude@graphics\@jmlr@new\Ginclude@graphics}%
1151 {\let\Ginclude@graphics\@jmlr@old\Ginclude@graphics}%
1152 \fi
```

`\artappendix` Switch to appendices in an article

```
1153 \newcommand{\artappendix}{\par
1154 \setcounter{section}{0}
1155 \setcounter{subsection}{0}
1156 \def\thesection{\Alph{section}}

1157 \def\theHsection{\theHchapter.\Alph{section}}
1158 \def\presectionnum{Appendix~}%
1159 }
```

The default assumes a stand-alone article.

`\appendix`

```
1160 \let\appendix\artappendix
```

`\booklinebreak` Provided for book production editors to fine tune the book line breaking. Does nothing in the standalone article.

```
1161 \newcommand{\booklinebreak}[1][{}]{}
```

#### 4.2.8 Compatibility with combine.cls

Define chapters to make this class play nicely with combine. These definitions are just copied from book.cls

```
1162 \newcounter{chapter}
1163 \renewcommand\thechapter{\@arabic\c@chapter}
1164 \newcommand\@chapapp{\chaptername}
```

Add sections to the chapter reset.

```
1165 \@addtoreset{section}{chapter}
```

`\chaptermark`

```
1166 \newcommand*\chaptermark[1][{}]
```

Chapters should only be defined when we're combining documents into a book.

`\bookchapter`

```
1167 \newcommand\bookchapter{%
1168 \if@openright\cleardoublepage\else\clearpage\fi
1169 \thispagestyle{plain}%
1170 \global\@topnum\z@
1171 \@afterindentfalse
1172 \secdef\@chapter\@schapter}
```

`\artchapter` Disable chapters for articles.

```
1173 \newcommand\artchapter{%
1174   \ClassError{jmlr}{Chapters not permitted in articles}{}}
```

`\chapter` The default assumes a stand-alone document.

```
1175 \let\chapter\artchapter
```

Label for the chapter entries in the toc.

```
1176 \def\@chaptoclabel{chapter}
```

`\@chapter` Numbered chapters

```
1177 \def\@chapter[#1]#2{\ifnum \c@secnumdepth >\m@ne
1178   \refstepcounter{chapter}%
1179   \if@mainmatter
1180     \typeout{\@chapapp\space\thechapter.}%
1181     \addcontentsline{toc}{\@chaptoclabel}%
1182     {\protect\numberline{\thechapter}#1}%
1183   \else
1184     \addcontentsline{toc}{\@chaptoclabel}{#1}%
1185   \fi
1186 \else
1187   \addcontentsline{toc}{\@chaptoclabel}{#1}%
1188 \fi
1189 \chaptermark{#1}%
1190 \addtocontents{lof}{\protect\advspace{10\p@}}%
1191 \addtocontents{lot}{\protect\advspace{10\p@}}%
1192 \if@twocolumn
1193   \@topnewpage[\@makechapterhead{#2}]%
1194 \else
1195   \@makechapterhead{#2}%
1196   \@afterheading
1197 \fi}
```

`\chaptertitleformat` Formats the chapter title

```
1198 \newcommand{\chaptertitleformat}[1]{%
1199   \Huge\bfseries#1%
1200 }
```

`\chapternumberformat` Formats the chapter number

```
1201 \newcommand{\chapternumberformat}[1]{%
1202   \huge\bfseries \@chapapp\space#1\par\nobreak
1203   \vskip 20\p@
1204 }
```

`\chapterformat` Overall format for chapter headings

```
1205 \newcommand*{\chapterformat}{\raggedright}
```

postchapterskip Vertical gap after chapter heading  
 1206 \newlength\postchapterskip  
 1207 \setlength\postchapterskip{40pt}

\prechapterskip Vertical gap before chapter heading  
 1208 \newlength\prechapterskip  
 1209 \setlength\prechapterskip{50pt}

makechapterhead Chapter heading for numbered chapters  
 1210 \def\@makechapterhead#1{%  
 1211 \null\vskip\prechapterskip  
 1212 {\parindent \z@ \normalfont\chapterformat  
 1213 \ifnum \c@secnumdepth >\m@ne  
 1214 \if@mainmatter  
 1215 \chapternumberformat{\thechapter}%  
 1216 \fi  
 1217 \fi  
 1218 \interlinepenalty\@M  
 1219 \chaptertitleformat{#1}\par\nobreak  
 1220 \vskip \postchapterskip  
 1221 }}

\@schapter Unnumbered chapters.  
 1222 \def\@schapter#1{\if@twocolumn  
 1223 \@topnewpage[\@makeschapterhead{#1}]%  
 1224 \else  
 1225 \@makeschapterhead{#1}%  
 1226 \@afterheading  
 1227 \fi}

makeschapterhead Layout for unnumbered chapter headings  
 1228 \def\@makeschapterhead#1{%  
 1229 \vspace\*\prechapterskip}%  
 1230 {\parindent \z@  
 1231 \normalfont\chapterformat  
 1232 \interlinepenalty\@M  
 1233 \chaptertitleformat{#1}\par\nobreak  
 1234 \vskip \postchapterskip  
 1235 }}

\l@chapter Format for chapter entry in toc  
 1236 \newcommand\*\l@chapter[2]{%  
 1237 \ifnum \c@tocdepth >\m@ne  
 1238 \addpenalty{-\@highpenalty}%  
 1239 \vskip 1.0em \@plus\p@  
 1240 \setlength\@tempdima{1.5em}%  
 1241 \begingroup  
 1242 \parindent \z@ \rightskip \@pnumwidth

```

1243     \parfillskip -\@pnumwidth
1244     \leavevmode \large\bfseries
1245     \advance\leftskip\@tempdima
1246     \hskip -\leftskip
1247     #1\nobreak\hfil \nobreak\hb@xt@\@pnumwidth{\hss #2}\par
1248     \penalty\@highpenalty
1249     \endgroup
1250 \fi}

```

`\l@appendix` Make appendix entries in the toc the same as that for chapters by default

```
1251 \let\l@appendix\l@chapter
```

`\chaptername`

```
1252 \newcommand\chaptername{Chapter}
```

`\frontmatter` Start the front matter (in book)

```

1253 \newcommand\frontmatter{%
1254   \cleardoublepage
1255   \@mainmatterfalse
1256   \renewcommand*\theHchapter{front-\thechapter}%
1257   \pagenumbering{roman}%
1258   \morefrontmatter
1259 }
1260 \newcommand\morefrontmatter{}

```

`\mainmatter` Start the main matter (in book)

```

1261 \newcommand\mainmatter{%
1262   \cleardoublepage
1263   \@mainmattertrue
1264   \setcounter{chapter}{0}%
1265   \renewcommand*\theHchapter{\thechapter}%
1266   \pagenumbering{arabic}%
1267   \moremainmatter
1268 }
1269 \newcommand\moremainmatter{}

```

`\backmatter` Start the back matter (in book)

```

1270 \newcommand\backmatter{%
1271   \if@openright
1272     \cleardoublepage
1273   \else
1274     \clearpage
1275   \fi
1276   \@mainmatterfalse}

```

`booktocpreamble`

```
1277 \newcommand*\booktocpreamble{}
```



booktocpostamble

```
1278 \newcommand*\booktocpostamble{}
```

tableofcontents This is for the main table of contents when using the combine class file, and is not for use in individual articles.

```
1279 \newcommand\booktableofcontents{%
1280   \if@twocolumn
1281     \@restonecoltrue\onecolumn
1282   \else
1283     \@restonecolfalse
1284   \fi
1285   \chapter*\contentsname
1286   \@mkboth{\MakeUppercase\contentsname}{\MakeUppercase\contentsname}}%
1287   \booktocpreamble
1288   \@starttoc{toc}%
1289   \booktocpostamble
1290   \if@restonecol
1291     \twocolumn
1292   \else
1293     \clearpage
1294   \fi
1295   \@mkboth{}{}%
1296 }
```

tableofcontents Table of contents for individual articles.

```
1297 \let\arttableofcontents\tableofcontents
```

\artpart A part in an article

```
1298 \newcommand{\artpart}{%
1299   \def\toclevel@part{0}%
1300   \if@noskipsec \leavevmode\fi
1301   \par
1302   \addvspace{4ex}%
1303   \@afterindentfalse
1304   \secdef\artpart\@sartpart
1305 }
1306 \let\@artpart\@part
1307 \let\@sartpart\@spart
```

\bookpart A part in a book forming a collection of articles

```
1308 \newcommand\bookpart{%
1309   \def\toclevel@part{-1}%
1310   \if@openright
1311     \cleardoublepage
1312   \else
1313     \clearpage
1314   \fi
```

```

1315 \thispagestyle{plain}%
1316 \if@twocolumn
1317   \onecolumn
1318   \@tempwattrue
1319 \else
1320   \@tempwafalse
1321 \fi
1322 \preparthook
1323 \secdef\@bookpart\@sbookpart}

```

`\parttitleformat` Format of the title for a part (in a book)

```

1324 \newcommand{\parttitleformat}[1]{%
1325   \Huge\bfseries#1%
1326 }

```

Part labels

```

1327 \newcommand*{\@parttoclabel}{part}

```

`\@partapp`

```

1328 \def\@partapp{\partname}

```

`\partnumberformat` Format of the part number (in a book)

```

1329 \newcommand{\partnumberformat}[1]{%
1330   \Huge\bfseries \@partapp\nobreakspace#1\par\nobreak
1331   \vskip 20\p@
1332 }

```

`\preparthook` Hook at the start of a part (in a book)

```

1333 \newcommand{\preparthook}{\null\vfil}

```

`\partformat` Overall format of part

```

1334 \newcommand*{\partformat}{\centering}

```

`\@bookpart` Numbered book part format

```

1335 \def\@bookpart[#1]#2{%
1336   \ifnum \c@secnumdepth >-2\relax
1337     \refstepcounter{part}%
1338     \addcontentsline{toc}{\@parttoclabel}{\protect\numberline{\thepart}#1}%
1339   \else
1340     \addcontentsline{toc}{\@parttoclabel}{#1}%
1341   \fi
1342   \markboth{}{}%
1343   {\interlinepenalty \@M
1344     \normalfont\partformat
1345     \ifnum \c@secnumdepth >-2\relax
1346       \partnumberformat{\thepart}%
1347     \fi
1348     \parttitleformat{#2}\par}%
1349   \postparthook}

```

`\@sbookpart` Unnumbered book part format

```
1350 \def\@sbookpart#1{%
1351     {\interlinepenalty \@M
1352      \normalfont\partformat
1353      \parttitleformat{#1}\par}%
1354     \postparthook}
```

`\postparthook` Hook after part heading

```
1355 \def\postparthook{\vfil\newpage
1356                 \if@twoside
1357                 \if@openright
1358                 \null
1359                 \thispagestyle{empty}%
1360                 \newpage
1361                 \fi
1362                 \fi
1363                 \if@tempswa
1364                 \twocolumn
1365                 \fi}
```

`\bookappendix` Switch to appendices in book

```
1366 \newcommand\bookappendix{\par
1367 \setcounter{table}{0}%
1368 \setcounter{figure}{0}%
1369 \zeroextracounters
1370 \par
1371 \gdef\theHchapter{\Alph {chapter}}%
1372 \xdef\Hy@chapapp{\Hy@appendixstring}%
1373 \setcounter{chapter}{0}%
1374 \setcounter{section}{0}%
1375 \gdef\@chapapp{\appendixname}%
1376 \gdef\thechapter{\@Alph\c@chapter}%
1377 \def\@write@jmlr@import{\@write@jmlr@apdimport}%
1378 \csname appendixmore\endcsname
1379 }
```

Define commands to switch between book/article modes

`\jmlrbookcommands` Switch to book commands

```
1380 \newcommand*\jmlrbookcommands{%
1381 \let\part\bookpart
1382 \let\chapter\bookchapter
1383 \let\appendix\bookappendix
1384 \let\tableofcontents\booktableofcontents
1385 \def\thesection{\thechapter.\arabic{section}}%
1386 }
```

`\jmlrarticlecommands` Switch to article commands

```
1387 \newcommand*\jmlrarticlecommands{%
```

```

1388 \let\part\artpart
1389 \let\chapter\artchapter
1390 \let\appendix\artappendix
1391 \let\tableofcontents\arttableofcontents
1392 \def\thesection{\arabic{section}}%
1393 }

```

Check for packages that are known to cause problems when combining articles into a book.

@check@packages

```

1394 \newcommand*{\@jmlr@check@packages}{%
1395 \@ifpackageloaded{epsfig}{%
1396 \ClassError{jmlr}{Obsolete package ‘epsfig’ detected.
1397 \MessageBreak
1398 Please use \string\includegraphics\space to include images
1399 instead}}}{}%
1400 \@ifpackageloaded{psfig}{%
1401 \ClassError{jmlr}{Obsolete package ‘psfig’ detected.
1402 \MessageBreak
1403 Please use \string\includegraphics\space to include images
1404 instead}}}{}%
1405 \@ifpackageloaded{subfig}{%
1406 \ClassError{jmlr}{Package ‘subfig’ detected.\MessageBreak
1407 This will cause a conflict if the article is incorporated
1408 \MessageBreak
1409 into a book using jmlbook.cls.
1410 \MessageBreak
1411 Please use \string\subfigure\space and
1412 \string\subtable\space instead}}}{}%
1413 \@ifpackageloaded{theorem}{%
1414 \ClassError{jmlr}{Package ‘theorem’ detected.\MessageBreak
1415 This can cause a conflict with other packages used by jmlr}}}{}%
1416 \@ifpackageloaded{ntheorem}{%
1417 \ClassError{jmlr}{Package ‘ntheorem’ detected.\MessageBreak
1418 This can cause a conflict with other packages used by jmlr}}}{}%
1419 \@ifpackageloaded{amsthm}{%
1420 \ClassError{jmlr}{Package ‘amsthm’ detected.\MessageBreak
1421 This package conflicts with the jmlr class}}}{}%
1422 \@ifpackageloaded{pdfpages}{Package ‘pdfpages’ detected.\MessageBreak
1423 This can cause a problem for jmlrbook}}}{}%
1424 \@ifpackageloaded{geometry}{Package ‘geometry’ detected.\MessageBreak
1425 This can cause a problem for jmlrbook}}}{}%
1426 \@ifpackageloaded{tabularx}{%
1427 \ClassError{jmlr}{Package ‘tabularx’ detected.\MessageBreak
1428 This will break footnote links}}}{}%

1429 \@ifpackageloaded{jmlr2e}{%
1430 \ClassError{jmlr}{Package ‘jmlr2e’ detected.\MessageBreak
1431 This can’t be used with the jmlr class}}}{}%
1432 }

```

```
1433 \AtBeginDocument{%
1434 \@jmlr@check@packages
1435 \let\@jmlr@check@packages\relax
1436 }
```

ssPackageChecks Don't check for potentially problematic packages. (If I find this in any paper sent to me for inclusion in a book, it will annoy me.)

```
1437 \newcommand*\jmlrSuppressPackageChecks}{%
1438 \let\@jmlr@check@packages\relax
1439 }
```

Discourage authors from using obsolete commands:

\obsoletefontcs

```
1440 \DeclareRobustCommand*\obsoletefontcs}[1]{%
1441 \ClassWarning{jmlr}{Obsolete command
1442 \expandafter\string\csname#1\endcsname\space detected}%
1443 \csname #1 \endcsname
1444 }
```

\bf

```
1445 \renewcommand*\bf}{%
1446 \obsoletefontcs{bf}%
1447 }
```

\it

```
1448 \renewcommand*\it}{%
1449 \obsoletefontcs{it}%
1450 }
```

\sc

```
1451 \renewcommand*\sc}{%
1452 \obsoletefontcs{sc}%
1453 }
```

\rm

```
1454 \renewcommand*\rm}{%
1455 \obsoletefontcs{rm}%
1456 }
```

\sf

```
1457 \renewcommand*\sf}{%
1458 \obsoletefontcs{sf}%
1459 }
```

\tt

```
1460 \renewcommand*\tt}{%
1461 \obsoletefontcs{tt}%
1462 }
```

ckforpseudocode Check for pseudocode package since it conflicts with the algorithm package and quite often both packages are used in the same book or proceedings.

```
1463 \providecommand*{\jmlrcheckforpseudocode}{%
1464   \@ifpackageloaded{pseudocode}%
1465   {%
1466     \let\pseudoRETURN\RETURN
1467     \let\pseudoTRUE\TRUE
1468     \let\pseudoFALSE\FALSE
1469     \let\pseudoAND\AND
1470     \let\pseudoOR\OR
1471     \let\pseudoNOT\NOT
1472     \let\pseudoTO\TO
1473     \let\pseudoCOMMENT\COMMENT
1474     \let\pseudoIF\IF
1475     \let\pseudoELSE\ELSE
1476     \let\pseudoFOR\FOR
1477     \let\pseudoFORALL\FORALL
1478     \let\pseudoWHILE\WHILE
1479     \let\pseudoREPEAT\REPEAT
1480     \let\pseudoUNTIL\UNTIL
1481     \let\pseudoENDFOR\ENDFOR
1482     \let\RETURN\undefined
1483     \let\TRUE\undefined
1484     \let\FALSE\undefined
1485     \let\AND\undefined
1486     \let\OR\undefined
1487     \let\NOT\undefined
1488     \let\TO\undefined
1489     \let\COMMENT\undefined
1490     \let\IF\undefined
1491     \let\ELSE\undefined
1492     \let\FOR\undefined
1493     \let\FORALL\undefined
1494     \let\WHILE\undefined
1495     \let\REPEAT\undefined
1496     \let\UNTIL\undefined
1497     \let\ENDFOR\undefined
1498     \pretol\pseudocode{%
1499     \let\RETURN\pseudoRETURN
1500     \let\TRUE\pseudoTRUE
1501     \let\FALSE\pseudoFALSE
1502     \let\AND\pseudoAND
1503     \let\OR\pseudoOR
1504     \let\NOT\pseudoNOT
1505     \let\TO\pseudoTO
1506     \let\COMMENT\pseudoCOMMENT
1507     \let\IF\pseudoIF
1508     \let\ELSE\pseudoELSE
1509     \let\FOR\pseudoFOR
```

```

1510 \let\FORALL\pseudoFORALL
1511 \let\WHILE\pseudoWHILE
1512 \let\REPEAT\pseudoREPEAT
1513 \let\UNTIL\pseudoUNTIL
1514 \let\ENDFOR\pseudoENDFOR
1515 }%
1516 }%
1517 {}%
1518 }
1519 \jmlrcheckforpseudocode

```

### 4.3 jmlrbook.cls Code

Class file for books composed of articles using the jmlr class.

```
1520 \NeedsTeXFormat{LaTeX2e}
```

Declare class:

```
1521 \ProvidesClass{jmlrbook}[2020/09/21 v1.28 (NLCT) JMLR Book Style]
```

Need xkeyval package to have key=value class options

```
1522 \RequirePackage{xkeyval}
```

Requires double spacing for the title page

```
1523 \RequirePackage{setspace}
```

Path used to determine if the preface is in the main document or in a separate file.

jmlrprefacefile

```
1524 \newcommand*\jmlrprefacepath{}
```

The fink package is now deprecated, so only use it if currfile isn't installed.

```
1525 \IfFileExists{currfile.sty}%
```

```
1526 {
```

```
1527 \RequirePackage{currfile}
```

```
1528 \renewcommand*\jmlrprefacepath{\currfilepath}
```

```
1529 }%
```

```
1530 {%
```

```
1531 \RequirePackage{fink}
```

```
1532 \ifdef\finkpath
```

```
1533 {%
```

```
1534 \renewcommand*\jmlrprefacepath{\finkpath}%
```

```
1535 }
```

```
1536 {%
```

fink version too old.

```
1537 \ClassWarning{jmlrbook}{Install 'currfile' package or update
```

```
1538 'fink' package}
```

```
1539 }
```

```
1540 }
```

Some packages need to be loaded before hyperref so provide a hook to do this:

```
1541 \providecommand*\jmlrprehyperref{}
```

`\ifgrayscale` Determine whether to select color or grayscale

```
1542 \newif\ifgrayscale
```

```
1543 \grayscalefalse
```

`draft`

```
1544 \DeclareOptionX{draft}{\setlength\overfullrule{5pt}}
```

`final`

```
1545 \DeclareOptionX{final}{\setlength\overfullrule{0pt}}
```

`color`

```
1546 \DeclareOptionX{color}{\grayscalefalse}
```

`gray`

```
1547 \DeclareOptionX{gray}{\grayscaletrue}
```

Pass letterpaper and 7x10 to jmlr.

`letterpaper`

```
1548 \DeclareOptionX{letterpaper}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

`7x10`

```
1549 \DeclareOptionX{7x10}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

Pass html and nohtml to jmlr. (Used by makejmlrbookgui)

`html`

```
1550 \DeclareOptionX{html}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

`nohtml`

```
1551 \DeclareOptionX{nohtml}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

`lrprefaceheader`

```
1552 \newcommand*\jmlrprefaceheader}{%
```

```
1553 \phantomsection
```

```
1554 \chapter*{\prefacename}%
```

```
1555 \addcontentsline{toc}{chapter}{\prefacename}%
```

```
1556 \markboth{\prefacename}{\prefacename}%
```

```
1557 }
```

Pass wcp, pmlr and nowcp options to jmlr and set preface header.

`wcp`

```
1558 \DeclareOptionX{wcp}{%
```

```
1559 \PassOptionsToClass{\CurrentOption}{jmlr}%
```

```
1560 }
```



pmlr

```
1561 \DeclareOptionX{pmlr}{%
1562   \PassOptionsToClass{\CurrentOption}{jmlr}%
1563 }
```

nowcp

```
1564 \DeclareOptionX{nowcp}{%
1565   \PassOptionsToClass{\CurrentOption}{jmlr}%
1566 }
```

Pass tablecaptiontop and tablecaptionbottom options to jmlr.

tablecaptiontop

```
1567 \DeclareOptionX{tablecaptiontop}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

tablecaptionbottom

```
1568 \DeclareOptionX{tablecaptionbottom}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

Pass font size commands to jmlr

10pt

```
1569 \DeclareOptionX{10pt}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

11pt

```
1570 \DeclareOptionX{11pt}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

12pt

```
1571 \DeclareOptionX{12pt}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

Switch on two-side mode by default

```
1572 \@twosidetrue
```

oneside

```
1573 \DeclareOptionX{oneside}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

twoside

```
1574 \DeclareOptionX{twoside}{\PassOptionsToClass{\CurrentOption}{jmlr}}
```

pdfxa

```
1575 \define@boolkey{jmlrbook.cls}[jmlr]{pdfxa}[true]{}
1576 \jmlrpdfxafalse
```

Process options

```
1577 \ProcessOptionsX
```

If `\jmlrgrayscale` has been defined, let it override the class options. If it is defined, it should be set to 0 for the online version and any other number for the grayscale print version.

```

1578 \@ifundefined{jmlrgrayscale}{}%
1579 {%
1580   \ifnum\jmlrgrayscale=0\relax
1581   \grayscalefalse
1582   \else
1583   \grayscaletrue
1584   \fi
1585 }

```

This next bit is a modification of `pdfx`. It's only used for the print version when the `pdfxa` option is used.

```

1586 \ifgrayscale
1587 \newcommand*{\jmlrwritepdfinfo}{%
1588   \protected@write\@auxout{}{\string\jmlrbook@info{\xmpAuthor}\xmpTitle}}%
1589 }
1590 \ifjmlrpdfxa
1591 \def\convertDate{\getYear}
1592 {\catcode'\D=12
1593 \gdef\getYear D:#1#2#3#4{\edef\xYear{#1#2#3#4}\getMonth}
1594 }
1595 \def\getMonth#1#2{\edef\xMonth{#1#2}\getDay}
1596 \def\getDay#1#2{\edef\xDay{#1#2}\getHour}
1597 \def\getHour#1#2{\edef\xHour{#1#2}\getMin}
1598 \def\getMin#1#2{\edef\xMin{#1#2}\getSec}
1599 \def\getSec#1#2{\edef\xSec{#1#2}\getTZh}
1600 {%
1601   \catcode'\Z=12
1602   \gdef\tmpz{Z}
1603 }
1604 \def\hash{\expandafter\@gobble\string\#}%
1605 \def\amp{\expandafter\@gobble\string\&}%
1606 \def\xmpAmp{\amp\hash x0026;}%
1607 \def\sep{</rdf:li><rdf:li>}
1608 \def\TextCopyright{\amp\hash x00A9;}
1609 \def\Title#1{\gdef\xmpTitle{#1}}
1610 \def\Author#1{\gdef\xmpAuthor{#1}}
1611 \def\Keywords#1{\gdef\xmpKeywords{#1}}
1612 \let\xmpKeywords\@empty
1613 \let\xmpSubject\xmpKeywords
1614 \def\Creator#1{\gdef\xmpCreator{#1}}
1615 \def\xmpCreator{\@pdfcreator}
1616 \def\Producer#1{\gdef\xmpProducer{#1}}
1617 \def\xmpProducer{pdfTeX}
1618 \def\Volume#1{\gdef\xmpVolume{#1}}
1619 \let\xmpVolume\@empty
1620 \def\Issue#1{\gdef\xmpIssue{#1}}
1621 \let\xmpIssue\@empty

```

```

1622 \def\CoverDisplayDate#1{\gdef\xmpCoverDisplayDate{#1}}
1623 \let\xmpCoverDisplayDate\@empty
1624 \def\CoverDate#1{\gdef\xmpCoverDate{#1}}
1625 \let\xmpCoverDate\@empty
1626 \def\Copyright#1{\gdef\xmpCopyright{#1}}
1627 \let\xmpCopyright\@empty
1628 \def\Doi#1{\gdef\xmpDoi{#1}}
1629 \let\xmpDoi\@empty
1630 \def\Lastpage#1{\gdef\xmpLastpage{#1}}
1631 \let\xmpLastpage\@empty
1632 \def\Firstpage#1{\gdef\xmpFirstpage{#1}}
1633 \let\xmpFirstpage\@empty
1634 \def\Journaltitle#1{\gdef\xmpJournaltitle{#1}}
1635 \let\xmpJournaltitle\@empty
1636 \def\Journalnumber#1{\gdef\xmpJournalnumber{#1}}
1637 \let\xmpJournalnumber\@empty
1638 \def\Org#1{\gdef\xmpOrg{#1}}
1639 \let\xmpOrg\@empty
1640 \def\CreatorTool#1{\gdef\xmpCreatorTool{#1}}
1641 \def\xmpCreatorTool{\xmpProducer}
1642 \def\AuthoritativeDomain#1{\gdef\xmpAuthoritativeDomain{#1}}
1643 \let\xmpAuthoritativeDomain\@empty
1644 \def\findUUID#1{\edef\tmpstring{\pdfmdfivesum{#1}}
1645 \expandafter\eightofnine\tmpstring\end}
1646 \def\eightofnine#1#2#3#4#5#6#7#8#9\end{%
1647 \xdef\eightchars{#1#2#3#4#5#6#7#8}
1648 \fouroffive#9\end}
1649 \def\fouroffive#1#2#3#4#5\end{\xdef\ffourchars{#1#2#3#4}
1650 \sfouroffive#5\end}
1651 \def\sfouroffive#1#2#3#4#5\end{\xdef\sfourchars{#1#2#3#4}
1652 \tfouroffive#5\end}
1653 \def\tfouroffive#1#2#3#4#5\end{\xdef\tfourchars{#1#2#3#4}
1654 \xdef\laststring{#5}}
1655 \def\uuid{\eightchars-%
1656 \ffourchars-%
1657 \sfourchars-%
1658 \tfourchars-%
1659 \laststring}

```

\getTZh This is a modification of the command from pdfx that also works for zero and negative hours.

```

1660 \def\getTZh#1{%
1661 \def\TZprefix{#1}%
1662 \ifx\TZprefix\tmpz
1663 \def\xTZsign{+}%
1664 \def\xTZh{00}%
1665 \def\xTZm{00}%
1666 \let\getTZnext\doConvDate
1667 \else
1668 \let\xTZsign\TZprefix

```

```

1669     \let\getTZnext\getTZhm
1670     \fi
1671     \getTZnext
1672 }

```

`\getTZm` This is a modified version of the command from pdfx.

```

1673 \def\getTZhm#1#2'#3#4' {%
1674     \edef\xTZh{#1#2}%
1675     \edef\xTZm{#3#4}%
1676     \doConvDate
1677 }

```

`\doConvDate` Defines the date using information derived from parsing `\pdfcreationdate`

```

1678 \def\doConvDate{%
1679     \edef\convDate{\xYear-\xMonth-\xDay
1680         T\xHour:\xMin:\xSec\xTZsign\xTZh:\xTZm}%
1681 }

```

`\@pre@hyperref` This macro contains a trimmed down version of pdfx.

```

1682 \newcommand{\@pre@hyperref}{%
1683     \IfFileExists{FOGRA39L.icc}%
1684     {%
1685         \pdfminorversion=3
1686         \pdfpageattr{/MediaBox[0 0 595 793]
1687             /BleedBox[0 0 595 793]
1688             /TrimBox[25 20 570 773]}%
1689         \findUUID{\jobname.pdf}%
1690         \edef\xmpdocid{\uuid}%
1691         \findUUID{\pdfcreationdate}%
1692         \edef\xmpinstid{\uuid}%
1693         \InputIfFileExists{\jobname.xmpdata}{-}{-}%
1694         \RequirePackage{xmpincl}%
1695         \expandafter\convertDate\pdfcreationdate
1696         \def\@pctchar{\expandafter\@gobble\string\%}
1697         \def\@bchar{\expandafter\@gobble\string\}
1698         \immediate\pdfobj stream attr{/N 4} file{FOGRA39L.icc}
1699         \edef\OBJ@CVR{\the\pdflastobj}
1700         \pdfcatalog{/OutputIntents [ <<
1701             /Type/OutputIntent
1702             /S/GTS_PDFX
1703             /OutputCondition (FOGRA39)
1704             /OutputConditionIdentifier (FOGRA39 \@bchar(ISO Coated v2
1705                 300\@pctchar\space \@bchar(ECI\@bchar)\@bchar))
1706             /DestOutputProfile \OBJ@CVR\space 0 R
1707             /RegistryName(http://www.color.org)
1708             >> ]}
1709         \input glyphtounicode.tex
1710         \input glyphtounicode-cmr.tex
1711         \pdfgentounicode=1

```

```

1712     \RequirePackage[draft,pdftex,pdfpagemode=UseNone,bookmarks=false]{hyperref}%
1713 }%
1714 {%
1715     \ClassError{jmlrbook}{Can't find 'FOGRA39L.icc'}%
1716     {Download ISOcoated\string_v2\string_330\string_bas.icc from
1717     http://www.colormangement.org/en/isoprofile.html
1718     Rename it FOGRA39L.icc and put it in the pdfx folder}%
1719 }%
1720 }
1721 \renewcommand*{\jmlrwritepdfinfo}{%
1722     \begingroup
1723     \let\&=\xmpAmp
1724     \IfFileExists{pdfx-1a.xmp}{%
1725         \pdfcompresslevel=0
1726         \immediate\pdfobj stream attr {/Type /Metadata /Subtype /XML}
1727         file{pdfx-1a.xmpi}
1728         \pdfcatalog{/Metadata \the\pdflastobj\space 0 R}
1729     }%
1730     {}%
1731     \endgroup
1732     \protected@write@auxout{}{\string\jmlrbook@info{\xmpAuthor}{\xmpTitle}}%
1733     \pdfinfo{
1734         /Author(\xmpAuthor)%
1735         /Title(\xmpTitle)%
1736         /Creator(\xmpProducer)%
1737         /CreationDate(\convDate)%
1738         /ModDate(\convDate)%
1739         /Producer(\xmpProducer)%
1740         /Trapped /False
1741         /GTS_PDFXVersion (PDF/X-1:2001)%
1742         /GTS_PDFXConformance (PDF/X-1a:2001)%
1743     }%
1744 }

1745 \fi
1746 \else
1747 \newcommand*{\jmlrwritepdfinfo}{}
1748 \fi

```

\jmlrbook@info Not needed (information provided for MakeJmlrBookGUI)

```
1749 \newcommand*{\jmlrbook@info}[2]{}

```

\jmlrbook@location Not needed (information provided for MakeJmlrBookGUI)

```
1750 \newcommand*{\jmlrbook@location}[1]{}

```

\@post@hyperref

```

1751 \newcommand*{\@post@hyperref}{%
1752     \let\@org@c@lenddoca\c@lenddoca
1753     \let\c@lenddoca\undefined
1754 }

```

Load combine class. This requires a little bit of trickery.

```
1755 \let\@org@LoadClass\LoadClass
1756 \def\LoadClass#1{\let\LoadClass\@org@LoadClass\@org@LoadClass{jmlr}}
1757 \@org@LoadClass{combine}
1758 \let\c@lenddoca\@org@c@lenddoca
```

Requires combnat to work with natbib:

```
1759 \RequirePackage{combnat}
```

Need to apply a patch to combnat (this has now been fixed in combnat, but user might be using an old version):

```
1760 \renewcommand\c@laNAT@parse[1]{\%
1761   \let\protect=\@unexpandable@protect\let~\relax
1762   \let\active@prefix=\@gobble
1763   \xdef\NAT@temp{\csname b@#1\@extra@b@citeb\endcsname}}%
1764   \expandafter\NAT@split\NAT@temp?????@%
1765   \expandafter\NAT@parse@date\NAT@date?????@%
1766   \ifciteindex\NAT@index\fi}
1767
1768 \renewcommand\c@lbNAT@parse[1]{\%
1769   \let\protect=\@unexpandable@protect\let~\relax
1770   \let\active@prefix=\@gobble
1771   \xdef\NAT@temp{\csname B?\jobname?@#1\@extra@b@citeb\endcsname}}%
1772   \expandafter\NAT@split\NAT@temp?????@%
1773   \expandafter\NAT@parse@date\NAT@date?????@%
1774   \ifciteindex\NAT@index\fi}
```

Start new chapters on the right hand page:

```
1775 \newif\if@openright
1776 \@openrighttrue
1777 \newif\if@mainmatter
```

Define commands that affect the formatting:

`\pagerule` Draw line across the text block.

```
1778 \newcommand*\pagerule[1][0pt]{\par\noindent
1779   \rule[#1]{\linewidth}{2pt}\par}
```

`preface` The preface environment starts a new chapter but also writes information to the main aux file for `makejmlrbook`. The optional argument is the file name for the extracted preface.

```
1780 \ifjmlrhtml
1781   \newenvironment{preface}[1][preface]%
1782   {%
1783     \noindent\HCode{<h2>\prefacename</h2>}%
1784   }%
1785   {%
1786   }
1787 \else
1788   \newenvironment{preface}[1][preface]%
1789   {%
```

```

1790 \jmlrprefaceheader
1791 \protected@write\@mainauxout
1792   {}{\string\@prefacestart{\thepage}{\arabic{page}}}%
1793 \protected@write\@mainauxout{}{\string\@prefacefile{\jmlrprefacepath}{#1}}%
1794 }%
1795 {%
1796 \protected@write\@mainauxout{}{\string\@prefaceend{\thepage}}%
1797 }
1798 \fi

```

\prefacename

```
1799 \newcommand*\@prefacename{Preface}
```

\@prefacefile

```
1800 \newcommand*\@prefacefile[2]{}

```

\@prefacestart

```
1801 \newcommand*\@prefacestart[2]{}

```

\@prefaceend

```
1802 \newcommand*\@prefaceend[1]{}

```

\@prefaceeditor

```
1803 \newcommand*\@prefaceeditor[1]{}

```

Cross-reference chapters:

```
1804 \newcommand*\chapterrefname{Chapter}

```

```
1805 \newcommand*\chaptersrefname{Chapters}

```

\chapterref

```
1806 \newcommand*\chapterref[1]{%

```

```
1807 \objectref{#1}{\chapterrefname}{\chaptersrefname}{}}

```

Cross-referencing imported articles:

\articlepageref Page number of start of article

```
1808 \newcommand*\articlepageref[1]{%

```

```
1809 \pageref{#1jmlrstart}%

```

```
1810 }

```

articlepagesref Page range of article

```
1811 \newcommand*\articlepagesref[1]{%

```

```
1812 \pageref{#1jmlrstart}--\pageref{#1jmlrend}%

```

```
1813 }

```

articlepagesref Page range of article for use within the article

```
1814 \newcommand*\@articlepagesref{%

```

```
1815 \pageref{jmlrstart}--\pageref{jmlrend}%

```

```
1816 }

```

```

articletitleref  Reference the short title of an imported article
1817 \newcommand*{\articletitleref}[1]{\nameref{#1jmlrstart}}

articleauthorref Reference the authors of an imported article
1818 \newcommand*{\articleauthorref}[1]{%
1819 \@ifundefined{jmlr@author@#1}%
1820 {%
1821 \ClassWarning{jmlrbook}{Label ‘#1’ undefined}%
1822 }%
1823 {%
1824 \@nameuse{jmlr@author@#1}%
1825 }%
1826 }

\jmlrtitlehook  Extra title information
1827 \renewcommand*\jmlrtitlehook{%
1828 \hypersetup{pdftitle={\@shorttitle}}%
1829 \def\xmpTitle{\@shorttitle}%
1830 \let\jmlrtitlehook\relax
1831 }
1832 \providecommand*\xmpTitle{\@title}%

\jmlrauthorhook
1833 \renewcommand*\jmlrauthorhook{%
1834 \ifx@sauthor\@empty
1835 \hypersetup{pdfauthor={\@author}}%
1836 \else
1837 \hypersetup{pdfauthor={\@sauthor}}%
1838 \fi
1839 \def\xmpAuthor{\@sauthor}%
1840 \let\jmlrauthorhook\relax
1841 \let\@shortauthor\@empty
1842 }
1843 \providecommand*\xmpAuthor{\@author}%

\subtitle
1844 \newcommand*{\@subtitle}{}
1845 \newcommand*{\subtitle}[1]{\renewcommand*{\@subtitle}{#1}}

\volume
1846 \newcommand*{\@volume}{\@jmlrvolume}
1847 \newcommand*{\volume}[1]{%
1848 \renewcommand*{\@volume}{#1}%
1849 \ifjmlrpdfxa
1850 \let\xmpVolume\@volume
1851 \fi
1852 }

```



```

\jmlrissue
1853 \newcommand*{\@issue}{\@jmlrissue}
1854 \newcommand*{\issue}[1]{%
1855   \renewcommand*{\@issue}{#1}%
1856   \ifjmlrpdfxa
1857     \let\xmpIssue\@issue
1858   \fi
1859 }

thejmlrworkshop Provided in the event that it's required for the title page.
1860 \newcommand*{\thejmlrworkshop}{\@jmlrworkshop}

\team
1861 \newcommand*{\@team}{}
1862 \newcommand*{\team}[1]{\renewcommand*{\@team}{#1}}

\jmlrlocation
1863 \newcommand*{\@jmlrlocation}{}
1864 \newcommand*{\jmlrlocation}[1]{%
1865   \renewcommand*{\@jmlrlocation}{#1}%
1866   \protected@write\@auxout{}{\string\jmlrbook@location{#1}}%
1867 }

ctioneditorname
1868 \newcommand*{\@productioneditorname}{Production Editor}

roductioneditor
1869 \newcommand*{\@productioneditor}{}
1870 \newcommand*{\productioneditor}[1]{%
1871   \renewcommand*{\@productioneditor}{#1}%
1872   \renewcommand*{\@productioneditorname}{Production Editor}%
1873 }

roductioneditors
1874 \newcommand*{\productioneditors}[1]{%
1875   \renewcommand*{\@productioneditor}{#1}%
1876   \renewcommand*{\@productioneditorname}{Production Editors}%
1877 }

\logo Title page image
1878 \newcommand*{\@logo}{}
1879 \newcommand*{\logo}[2][ ]{%
1880   \ifjmlrhtml
1881     \def\@logo@tmp{#1}%
1882     \ifx\@logo@tmp\@empty
1883       \renewcommand*{\@logo}{#2}%
1884     \else
1885       \renewcommand*{\@logo}{\HCode{<a href="#1">}#2\HCode{</a>}}%

```

```

1886 \fi
1887 \else
1888 \renewcommand*{\@logo}{#2}%
1889 \fi
1890 }

```

`\booklinebreak` Provided for book production editors to fine tune the book line breaking.

```

1891 \renewcommand*{\booklinebreak}[1][4]{\linebreak[#1]}

```

Set article title

```

1892 \def\c@lbmaketitle{\jmlrmaketitle}

```

The book's title:

`\maintitle`

```

1893 \newcommand*{\maintitle}{}

```

Make it easier to modify the book's title page:

`SetTitleElement`

```

1894 \newcommand*{\SetTitleElement}[3]{%
1895   {%
1896     \expandafter\ifx\csname @#1\endcsname \@empty
1897     \else
1898       #2\csname @#1\endcsname#3%
1899     \fi
1900   }%
1901 }

```

`\IfTitleElement` Determine if the given element has been set:

```

1902 \newcommand{\IfTitleElement}[3]{%
1903   \expandafter\ifx\csname @#1\endcsname \@empty
1904   #2%
1905   \else
1906   #3%
1907   \fi
1908 }

```

`\titlebody`

```

1909 \newcommand{\titlebody}{%
1910   \SetTitleElement{title}{\maintitlefont}{\postmaintitle}%
1911   \SetTitleElement{volume}{\mainvolumefont}{\postmainvolume}%
1912   \SetTitleElement{subtitle}{\mainsubtitlefont}{\postmainsubtitle}%
1913   \SetTitleElement{logo}{\mainlogofont}{\postmainlogo}%
1914   \SetTitleElement{team}{\mainteamfont}{\postmainteam}%
1915   \SetTitleElement{author}{\mainauthorfont}{\postmainauthor}%
1916   \SetTitleElement{productioneditor}{\mainproductioneditorfont}%
1917     {\postmainproductioneditor}%
1918 }

```

\c@lamaketitle

```
1919 \ifjmlrhtml
1920 \renewcommand{\c@lamaketitle}{%
1921 \HCode{<table cellpadding="2" cellspacing="2" border="0" width="100\%">}%
1922 \HCode{<tbody><tr><td valign="top">}%
1923 \HCode{<h1>}%
1924 \@title\newline
1925 \ifx\@jmlrvolume\@empty
1926 \ifx\@volume\@empty
1927 \else
1928 Volume \@volume
1929 \ifx\@subtitle\@empty\else: \fi
1930 \fi
1931 \else
1932 Volume \@jmlrvolume
1933 \ifx\@subtitle\@empty\else: \fi
1934 \fi
1935 \@subtitle
1936 \HCode{</h1>}%
1937 \newline
1938 \textbf{Editors: \@author}
1939 \HCode{</td><td valign="top">}%
1940 \@logo
1941 \HCode{</td></tr></tbody></table>}%
1942 \let\maintitle\@title
1943 }
1944 \else
1945 \renewcommand{\c@lamaketitle}{%
1946 \pagenumbering{alph}%
1947 \pagestyle{empty}%
1948 \begin{titlepage}%
1949 \let\footnotesize\small
1950 \let\footnoterule\relax
1951 \let\footnote\thanks
1952 \titlebody
1953 \par
1954 \@thanks
1955 \end{titlepage}%
1956 \setcounter{footnote}{0}%
1957 \let\maintitle\@title
1958 \c@lmtitleempty
1959 }
1960 \fi
```

\maintitlefont

```
1961 \renewcommand{\maintitlefont}{%
1962 \null\vskip15pt\relax\par
1963 \flushleft\Huge\bfseries\noindent}
```

```

\postmaintitle
1964 \newcommand{\postmaintitle}{%
1965   \par\relax
1966 }

\mainvolumefont
1967 \newcommand{\mainvolumefont}{%
1968   \flushleft\noindent\LARGE\bfseries Volume
1969 }

\postmainvolume
1970 \newcommand{\postmainvolume}{%
1971   \IfTitleElement{subtitle}{}{:}\par\relax
1972 }

\mainissuefont
1973 \newcommand{\mainissuefont}{%
1974   \flushleft\noindent\LARGE\bfseries Issue
1975 }

\postmainissue
1976 \newcommand{\postmainissue}{%
1977   \par\relax
1978 }

\mainsubtitlefont
1979 \newcommand{\mainsubtitlefont}{%
1980   \flushleft\LARGE\bfseries\noindent}

\postmainsubtitle
1981 \newcommand{\postmainsubtitle}{\par}

\mainlogofont
1982 \newcommand{\mainlogofont}{%
1983   \vfill
1984   \begin{center}}

\postmainlogo
1985 \newcommand{\postmainlogo}{\end{center}\vfill\par}

\mainteamfont
1986 \newcommand{\mainteamfont}{\flushleft\bfseries\Large\noindent}

\postmainteam
1987 \newcommand{\postmainteam}{\par}

```

\mainauthorfont

```
1988 \renewcommand{\mainauthorfont}{%
1989 \flushleft\Large\itshape\doublespacing\noindent}
```

\postmainauthor

```
1990 \renewcommand{\postmainauthor}{%
1991 \par}
```

ctioneditorfont

```
1992 \newcommand{\mainproductioneditorfont}{%
1993 \flushleft\Large\noindent \@productioneditorname: \itshape}
```

roductioneditor

```
1994 \newcommand{\postmainproductioneditor}{\par}
```

\maindatefont

```
1995 \renewcommand{\maindatefont}{}
```

\postmaindate

```
1996 \renewcommand{\postmaindate}{}
```

signoff Editorial team listed at the end of a preface etc. The mandatory argument is the date, the optional argument is the team title. Each editor should be separated with \Editor.

```
1997 \ifjmlrhtml
1998 \newenvironment{signoff}[2][The Editorial Team]{%
1999 \def\Editor##1{##1\par\vskip\baselineskip\noindent\ignorespaces}%
2000 \def\@editorialteam{#1}%
2001 \def\@signoffdate{#2}%
2002 \par\vskip\baselineskip\noindent
2003 \ifx\@signoffdate\@empty
2004 \else
2005 \emph{\@signoffdate}\nopagebreak\par
2006 \nopagebreak\vskip\baselineskip\noindent
2007 \fi
2008 \ifx\@editorialteam\@empty
2009 \else
2010 \@editorialteam:\nopagebreak\par\nopagebreak\vskip\baselineskip
2011 \fi
2012 \nopagebreak\noindent\ignorespaces
2013 }%
2014 {%
2015 }%
2016 \else
2017 \newenvironment{signoff}[2][The Editorial Team]{%
2018 \def\Editor##1{%
2019 \protected@write\@mainauxout{}{\string\@prefaceeditor{##1}}%
2020 \begin{tabular}{@{}l@{}}%
2021 ##1%
```

```

2022     \end{tabular}%
2023     \par\vskip\baselineskip\noindent\ignorespaces
2024 }%
2025 \def\@editorialteam{#1}%
2026 \def\@signoffdate{#2}%
2027 \par\vskip\baselineskip\noindent
2028 \ifx\@signoffdate\@empty
2029 \else
2030     \emph{\@signoffdate}\par
2031     \vskip\baselineskip\noindent
2032 \fi
2033 \ifx\@editorialteam\@empty
2034 \else
2035     \@editorialteam:\nopagebreak\par\vskip\baselineskip
2036 \fi
2037 \nopagebreak\noindent\ignorespaces
2038 }%
2039 {%
2040 }
2041 \fi

```

**authorsignoff** An author can sign off at the end of a chapter (such as a foreword). Each author should be separated with `\Author`.

```

2042 \newenvironment{authorsignoff}{%
2043 \def\Author##1{\begin{tabular}{@{}p{\linewidth}@{}}%
2044 ##1%
2045 \end{tabular}%
2046 \par\vskip\baselineskip\noindent\ignorespaces
2047 }%
2048 \par\vskip\baselineskip\noindent\ignorespaces
2049 }{%
2050 }

```

**zeroextracounters** Reset counters at the start of each imported article

```

2051 \renewcommand{\zeroextracounters}{%
2052 \@ifundefined{c@theorem}{\setcounter{theorem}{0}}%
2053 \@ifundefined{c@algorithm}{\setcounter{algorithm}{0}}%
2054 \@ifundefined{c@algocf}{\setcounter{algocf}{0}}%
2055 \@ifundefined{c@example}{\setcounter{example}{0}}%
2056 \@ifundefined{c@definition}{\setcounter{definition}{0}}%
2057 }

```

**\contentsname** Redefine title of the table of contents

```

2058 \renewcommand*\contentsname{Table of Contents}

```

**\theHalgorithm**

```

2059 \def\theHalgorithm{\theHchapter.\thealgorithm}

```

```

\theHsection
2060 \def\theHsection{\theHchapter.\thesection}
2061 \def\theHsubsection{\theHchapter.\thesubsection}
2062 \def\theHsubsubsection{\theHchapter.\thesubsubsection}
2063 \def\theHparagraph{\theHchapter.\theparagraph}

\theHsubfigure
2064 \def\theHsubfigure{\theHfigure.\arabic{subfigure}}
2065 \def\theHsubtable{\theHtable.\arabic{subtable}}

\theHfootnote
2066 \def\theHfootnote{\theHchapter.\alpha{footnote}}

\theHtable
2067 \def\theHtable{\theHchapter.\arabic{table}}

\theHfigure
2068 \def\theHfigure{\theHchapter.\arabic{figure}}

\theHalgocf
2069 \def\theHalgocf{\theHchapter.\thealgocf}

\mailto
2070 \renewcommand*{\mailto}[1]{%
2071 \href{mailto:#1}{\nolinkurl{#1}}}%
2072 }

2073 \c@lhaschapterfalse
2074 \let\c@lthesec\thesection

Make sure the hyperlinks work

portchapterHref
2075 \newcommand\doimportchapterHref{%
2076 \edef\@currentHref{chapter.\thechapter}%
2077 }

clevel@appendix Set the toc level for the main appendices
2078 \def\toclevel@appendix{-1}

hyperref and combine don't play nicely need to fudge the cross-referencing a bit.

\Xprefix
2079 \def\Xprefix{}

\Xref
2080 \DeclareRobustCommand\Xref{\@ifstar\@Xrefstar\T@Xref}%

```

\Xpageref

```
2081 \DeclareRobustCommand\Xpageref{%
2082   \@ifstar\@Xpagerefstar\T@Xpageref
2083 }%
```

Ref@StarSetXRef

```
2084 \def\HyRef@StarSetXRef#1{%
2085   \begingroup
2086   \Hy@safe@activestrue
2087   \edef\x{#1}%
2088   \@onelevel@sanitize\x
2089   \edef\x{\endgroup
2090     \noexpand\HyRef@@StarSetRef
2091     \expandafter\noexpand\csname r@\Xprefix\x\endcsname{x}}%
2092   }%
2093   \x
2094 }
2095 % \end{macrocode}
2096 %\end{macro}
2097 %
2098 %\begin{macro}{\@Xrefstar}
2099 % \begin{macrocode}
2100 \def\@Xrefstar#1{%
2101   \HyRef@StarSetXRef{#1}\@firstoffive
2102 }
```

\@Xpagerefstar

```
2103 \def\@Xpagerefstar#1{%
2104   \HyRef@StarSetXRef{#1}\@secondoffive
2105 }
```

\T@Xref

```
2106 \def\T@Xref#1{%
2107   \Hy@safe@activestrue
2108   \expandafter\@setXref\csname r@\Xprefix#1\endcsname\@firstoffive{#1}%
2109   \Hy@safe@activesfalse
2110 }%
```

\T@Xpageref

```
2111 \def\T@Xpageref#1{%
2112   \Hy@safe@activestrue
2113   \expandafter\@setXref\csname r@\Xprefix#1\endcsname\@secondoffive{#1}%
2114   \Hy@safe@activesfalse
2115 }%
```

\Xlabel

```
2116 \def\Xlabel#1{%
2117   \@bsphack
```



```

2118 \begingroup
2119   \@onelevel@sanitize\@currentlabelname
2120   \edef\@currentlabelname{%
2121     \expandafter\strip@period\@currentlabelname\relax.\relax\@@@
2122   }%
2123   \protected@write\@mainauxout{}{%
2124     \string\newlabel{\Xprefix#1}{\@currentlabel}\thepage}%
2125     {\@currentlabelname}{\@currentHref}{}}%
2126   }%
2127 \endgroup
2128 \@esphack
2129 }
2130 \let\ltx@label\Xlabel

```

\@setXref

```

2131 \def\@setXref#1#2#3{% csname, extract group, refname
2132   \ifx#1\relax
2133     \protect\G@refundefinedtrue
2134     \nfss@text{\reset@font\bfseries ??}%
2135     \@latex@warning{%
2136       Reference ‘#3’ on page \thepage \space undefined%
2137     }%
2138   \else
2139     \expandafter\Hy@setref@link#1\@empty\@empty\@nil{#2}%
2140   \fi
2141 }

```

\@secondoffive Something's redefining \@secondoffive incorrectly at the start of the document when hyperref's draft mode is on. Need to fix it.

```

2142 \AtBeginDocument{%
2143   \renewcommand\@secondoffive[5]{#2}%
2144   \jmlrwritepdfinfo
2145   \let\jmlrwritepdfinfo\relax
2146 }

```

Need to write imported chapter label to main auxfile.

@setimportlabel

```

2147 \def\@setimportlabel{%
2148   \let\@mainauxout\@auxout
2149   \let\HRlabel\label
2150 }
2151 \AtBeginDocument{\@jmlrbegindoc}

```

\@jmlrbegindoc

```

2152 \newcommand*\@jmlrbegindoc{
2153   \@setimportlabel
2154   \gdef\@setimportlabel{\let\ref\Xref \let\pageref\Xpageref}%
2155   \let\ReadBookmarks\relax

```

Patch to work with auxhook if loaded

```
2156 \ifundefined{@beginmainauxhook}{\@beginmainauxhook}%  
2157 }
```

Imported papers modify \InputIfFileExists so save original definition.

```
2158 \let\@org@InputIfFileExists\InputIfFileExists
```

jmlrpapers

```
2159 \newenvironment{jmlrpapers}{%  
  
2160 \def\@begindocumenthook{%  
2161   \@jmlrbegin  
2162   \let\bibcite\c@lbNATbibcite  
2163 }  
2164 \def\@enddocumenthook{%  
2165   \@jmlrenddoc  
2166   \let\bibcite\c@lbNAT@testdef  
2167 }  
2168 \begin{papers} []  
  
2169 \if@twocolumn  
2170   \def\@jmlr@restore{\twocolumn}%  
2171 \else  
2172   \def\@jmlr@restore{\onecolumn}%  
2173 \fi  
2174 \jmlrarticlecommands  
2175 \let\importpubpaper\@importpubpaper  
2176 \let\importpaper\@importpaper  
2177 \let\importarticle\@importarticle  
2178 \let\label\Xlabel  
2179 \let\ref\Xref  
2180 \pagestyle{article}%  
2181 }{%  
2182   \@jmlr@restore  
2183 \end{papers}  
2184 }
```

dtomaincontents

```
2185 \newcommand{\addtomaincontents}[2]{%  
2186   \protected@write\@mainauxout{\let\label@gobble\let\index@gobble  
2187     \let\glossary@gobble}{\string\@writefile{#1}{#2}}%  
2188 }
```

\@write@author

```
2189 \newcommand*\@write@author}[2]{%  
2190   \def\@jmlr@authors@sep{ and }%  
2191   \protected@write\@mainauxout{%  
2192     \string\@new@articleauthor{#1}{#2}%  
2193   }%  
2194 }
```

w@articleauthor

```
2195 \newcommand*{\@new@articleauthor}[2]{%
2196   \expandafter\gdef\csname @jmlr@author@#1\endcsname{%
2197     \hyperref[#1jmlrstart]{#2}}%
2198 }
```

ite@jmlr@import The accompanying makejmlrbook Perl script scans the aux file for information. Any articles imported using \importpubpaper, \importpaper or \importarticle need to write the relevant information to the aux file.

```
2199 \newcommand*{\@@write@jmlr@import}[3]{%
2200   \protected@write\@mainauxout{}\string\@jmlr@import{#1}{#2}{#3}}%
2201 }
```

\@jmlr@import L<sup>A</sup>T<sub>E</sub>X should ignore \@jmlr@import as it's only needed for makejmlrbook:

```
2202 \newcommand*{\@jmlr@import}[3]{}
```

@jmlr@apdimport As above but for files imported in the appendix.

```
2203 \newcommand*{\@@write@jmlr@apdimport}[3]{%
2204   \protected@write\@mainauxout{}\string\@jmlr@apdimport{#1}{#2}{#3}}%
2205 }
```

@jmlr@apdimport As above but for files imported in the appendix. L<sup>A</sup>T<sub>E</sub>X should ignore \@jmlr@apdimport as it's only needed for makejmlrbookgui:

```
2206 \newcommand*{\@jmlr@apdimport}[3]{}
```

ite@jmlr@import Initialise to \@write@jmlr@import and switch to \@write@jmlr@apdimport in the appendices.

```
2207 \def\@write@jmlr@import{\@@write@jmlr@import}
```

remaketitlehook Redefine \jmlrpremaketitlehook

```
2208 \def\jmlrpremaketitlehook{%
2209   \cleardoublepage
2210   \phantomsection
2211   \let\@currentlabelname\@shorttitle

2212   \refstepcounter{chapter}%
2213 }%
```

\jmlrimporthook Hook just before document is imported.

```
2214 \newcommand*{\jmlrimporthook}{}
```

\importpubpaper Import a document that has already been published. Syntax: \importpubpaper [*label*] {*dir*}{*file*}{*pages*} where *dir* is the directory in which the paper is located, *file* is the name of the file and *pages* indicates the page range for the original version. The optional argument is a label. This is used to prefix the labels and citations in the document so they don't clash with other imported articles. If omitted, *dir*/*file* is used instead.

```
2215 \newcommand*{\@importpubpaper}[4][\@importdir\@importfile]{%
```

```

2216 \bgroup
2217 \def\@importdir{#2/}%
2218 \def\@importfile{#3}%
2219 \@write@jmlr@import{#1}{#2}{#3}%
2220 \def\@extra@b@citeb{#1}%
2221 \def\@extra@b@info{#1}%
2222 \jmlrpages{#4}%
2223 \graphicspath{{\@importdir}}%
2224 \def\jmlrmaketitlehook{%

2225 \label{}}%
2226 \def\titlebreak{ }%
2227 \addtomaincontents{toc}%

2228 {%
2229 \protect\contentsline{papertitle}{\@title}{\thepage}%
2230 {page.\thepage}}%
2231 \pdfbookmark{\@shorttitle}{chapter.\theHchapter}%
2232 \def\@jmlr@authors@sep{ \& }%

2233 \tocchapterpubauthor{\@jmlr@authors}%
2234 {%
2235 \@jmlr@abbrv@proceedings
2236 \ifx\@jmlrvolume\@empty
2237 \ifx\@jmlrpages\@empty\else\space\fi
2238 \else
2239 \space\@jmlrvolume
2240 \ifx\@jmlrissue\@empty
2241 \else
2242 (\@jmlrissue)%
2243 \fi
2244 \ifx\@jmlrpages\@empty\else:\fi
2245 \fi
2246 \ifx\@jmlrpages\@empty
2247 \else
2248 \@jmlrpages
2249 \ifx\@jmlryear\@empty\else,\fi
2250 \fi
2251 \space\@jmlryear
2252 }%

2253 \@write@author{#1}{\@jmlr@authors}%
2254 }%
2255 \def\InputIfFileExists##1##2##3{%
2256 \IfFileExists{##1}{%
2257 \@org@InputIfFileExists{##1}{##2}{##3}%
2258 }%
2259 {%
2260 \@org@InputIfFileExists{\@importdir##1}{##2}{##3}%
2261 }%

```

```

2262     }%
2263     \def\Xprefix{#1}%
2264     \jmlrimporthook
2265     \import{\@importdir\@importfile}%
2266     \def\Xprefix{}%
2267     \egroup
2268     \gdef\@shortauthor{}%
2269     \gdef\@shorttitle{}%
2270     \gdef\@firstauthor{}%
2271     \gdef\@jmlr@authors{\@jmlrauthors}%
2272     \gdef\@jmlrauthors{}%
2273     \gdef\@firstsurname{}%
2274 }
2275 \newcommand{\importpubpaper}[4][ ]{%
2276   \ClassError{jmlrbook}{\string\importpubpaper\space
2277 not permitted outside 'jmlrpapers' environment}{}%
2278 }

```

`\importpaper` Like `\importpubpaper` but sets the pages to the page-range for this book.

```

2279 \newcommand{\@importpaper}[3][\@importdir\@importfile]{%
2280   \bgroup
2281     \def\@importdir{#2/}%
2282     \def\@importfile{#3}%
2283     \@writejmlr@import{#1}{#2}{#3}%
2284     \def\@extra@b@citeb{#1}%
2285     \def\@extra@b@info{#1}%
2286     \jmlrpages{\protect\@articlepagesref}%
2287     \graphicspath{\@importdir}%
2288     \def\jmlrmaketitlehook{%
2289       \label{}%
2290       \def\titlebreak{ }%
2291       \addtomaincontents{toc}%
2292       {%
2293         \protect\contentsline{papertitle}{\@title}{\thepage}%
2294         {page.\thepage}}%
2295         \pdfbookmark{\@shorttitle}{chapter.\theHchapter}%
2296         \def\@jmlr@authors@sep{ \& }%
2297         \tocchapterpubauthor{\@jmlr@authors}%
2298         {%
2299           \@jmlrabbrvproceedings
2300           \ifx\@jmlrvolume\@empty
2301             \space
2302           \else
2303             \space\@jmlrvolume
2304           \ifx\@jmlrissue\@empty
2305             \else
2306             (\@jmlrissue)%

```

```

2307         \fi
2308         :%
2309         \fi
2310         \protect\articlepagesref{#1}%
2311         \ifx\@jmlryear\@empty\else,\fi
2312         \space\@jmlryear
2313     }%

2314     \@writeauthor{#1}{\@jmlr@authors}%
2315 }%
2316 \def\InputIfFileExists##1##2##3{%
2317     \IfFileExists{##1}{%
2318         \@org@InputIfFileExists{##1}{##2}{##3}%
2319     }%
2320     {%
2321         \@org@InputIfFileExists{\@importdir##1}{##2}{##3}%
2322     }%
2323 }%
2324 \def\Xprefix{#1}%

```

Disable \jmlrvolume, \jmlryear, \jmlrworkshop etc (since the imported papers belong to the same volume as the book—use \importpubpaper for papers pre-published in another volume).

```

2325 \let\jmlrvolume\@gobble
2326 \let\jmlryear\@gobble
2327 \let\jmlrworkshop\@gobble
2328 \let\jmlrissue\@gobble
2329 \let\jmlrpages\@gobble
2330 \jmlrimporthook
2331 \import{\@importdir\@importfile}%
2332 \def\Xprefix{}%
2333 \egroup
2334 \gdef\@shortauthor{}%
2335 \gdef\@shorttitle{}%
2336 \gdef\@firstauthor{}%
2337 \gdef\@jmlr@authors{\@jmlrauthors}%
2338 \gdef\@jmlrauthors{}%
2339 \gdef\@firstsurname{}%
2340 }
2341
2342 \newcommand{\importpaper}[3] [] {%
2343 \ClassError{jmlrbook}{\string\importpaper\space
2344 not permitted outside ‘jmlrpapers’ environment}{}%
2345 }

```

`\importarticle` Import a document that hasn't been published. Syntax: `\importarticle[<label>]{<dir>}{<file>}` where *<dir>* is the directory in which the paper is located and *<file>* is the name of the file. The optional argument is a label. This is used to prefix the labels and citations in the document so they don't clash with other imported articles. If omitted, *<file>* is used instead.

```

2346 \newcommand{\@importarticle}[3][\@importdir\@importfile]{%
2347   \bgroup
2348     \def\@importdir{#2/}%
2349     \def\@importfile{#3}%
2350     \@writejmlr@import{#1}{#2}{#3}%
2351     \def\@extra@b@citeb{#1}%
2352     \def\@extra@b@info{#1}%
2353     \def\jmlrmaketitlehook{%
2354     \def\titlebreak{ }%
2355     \addtomaincontents{toc}%

2356     {%
2357     \protect\contentsline{papertitle}{\@title}{\thepage}%
2358     {page.\thepage}}%

2359     \label{}%
2360     \pdfbookmark{\@shorttitle}{chapter.\theHchapter}%
2361     \def\@jmlr@authors@sep{ \& }%

2362     \tocchapterauthor{\@jmlr@authors}%
2363     \@write@author{#1}{\@jmlr@authors}%
2364     \jmlrpages{}%
2365     \jmlrvolume{}%
2366     \jmlryear{}%
2367     \jmlrsubmitted{}%
2368     \jmlrpublished{}%
2369     \jmlrproceedings{ }%
2370   }%
2371   \graphicspath{{\@importdir}}%
2372   \def\InputIfFileExists###1##2###3{%
2373     \IfFileExists{##1}{%
2374       \@org@InputIfFileExists{##1}{##2}{##3}%
2375     }%
2376     {%
2377       \@org@InputIfFileExists{\@importdir##1}{##2}{##3}%
2378     }%
2379   }%
2380   \def\Xprefix{#1}%
2381   \jmlrimporthook

2382   \let\ps@jmlrtps\ps@articlet
2383   \import{\@importdir\@importfile}%
2384   \def\Xprefix{}%
2385   \egroup
2386   \gdef\@shortauthor{}%
2387   \gdef\@shorttitle{}%
2388   \gdef\@firstauthor{}%
2389   \gdef\@jmlr@authors{\@jmlrauthors}%
2390   \gdef\@jmlrauthors{}%
2391   \gdef\@firstsurname{}%

```

```

2392 }
2393 \newcommand{\importarticle}[3][]{%
2394   \ClassError{jmlrbook}{\string\importarticle\space
2395 not permitted outside ‘jmlrpapers’ environment}{}%
2396 }

```

`\addtocpart` Add a part to the TOC without printing anything in the text (but does a `\cleardoublepage`).

```

2397 \newcommand{\addtocpart}[1]{%
2398   \cleardoublepage
2399   \refstepcounter{tocpart}%
2400   \addtocontents{toc}{\protect\tocpart{#1}}%
2401   \pdfbookmark[-1]{#1}{part.\thetocpart}%
2402 }
2403 \newcounter{tocpart}

```

`\tocpart` Define the appearance of a part in the TOC.

```

2404 \newcommand{\tocpart}[1]{%
2405   \addpenalty{-\@highpenalty}%
2406   \vskip 1.0ex \@plus\p@
2407   \setlength\@tempdima{2.25em}%
2408   \begingroup
2409     \parindent \z@ \rightskip \@pnumwidth
2410     \parfillskip -\@pnumwidth
2411     \leavevmode \large\bfseries
2412     \advance\leftskip\@tempdima
2413     \hskip -\leftskip
2414     #1\nobreak\hfil \nobreak\hb@xt@\@pnumwidth{\hss \null}\par
2415     \penalty\@highpenalty
2416   \endgroup
2417 }

```

Set up the layout of the chapter headings

```

2418 \setlength{\prechapterskip}{3em}
2419 \setlength{\postchapterskip}{20pt}

```

`ternumberformat`

```

2420 \renewcommand{\chapternumberformat}[1]{%
2421   \Large\bfseries \@chapapp\space#1\par
2422 }

```

`ptertitleformat`

```

2423 \renewcommand{\chaptertitleformat}[1]{%
2424   \Large\bfseries #1}

```

`\chapterformat`

```

2425 \renewcommand*{\chapterformat}{%
2426   \raggedright
2427 }

```



Set up the format of a part in the book (not a part in an article).

`\preparthook`

```
2428 \renewcommand{\preparthook}{\cleardoublepage\null\vfil}
```

`partnumberformat`

```
2429 \renewcommand{\partnumberformat}[1]{%
2430   \Huge\bfseries \@partapp\nobreakspace#1\par\nobreak
2431   \vskip 20\p@
2432 }
```

`\postparthook`

```
2433 \def\postparthook{%
2434   \thispagestyle{empty}%
2435   \vfil\newpage
2436   \null
2437   \thispagestyle{empty}%
2438   \newpage
2439 }
```

`\@curparthead` The heading of the current part

```
2440 \newcommand{\@curparthead}{}
```

`parttitleformat`

```
2441 \renewcommand{\parttitleformat}[1]{#1%
2442   \gdef\@curparthead{\@partapp\space \thepart. #1}%
2443   \@mkboth{\@curparthead}{\@curparthead}%
2444 }
```

`\firstpageno` Change `\firstpageno` to do nothing as the page number will be determined by the book.

```
2445 \renewcommand{\firstpageno}[1]{}
```

`tocchapterauthor` Add the author of the current chapter to the table of contents.

```
2446 \newcommand{\tocchapterauthor}[1]{%
2447   \addtomaincontents{toc}{\protect\contentsline{chapterauthor}{%
2448     #1}{-}{-}}%
2449 }
```

`chapterpubauthor` Add the author of an imported prepublished paper to the table of contents. The first argument is the author (or list of authors). The second argument is the reference to the published article.

```
2450 \newcommand{\tocchapterpubauthor}[2]{%
2451   \addtomaincontents{toc}{\protect\contentsline{chapterauthor}{%
2452     #1; #2.}{-}{-}}%
2453 }
```

Set up the formatting in the TOC

```
2454 \renewcommand*\@pnumwidth{2em}
```

`\l@part` Format for book parts

```
2455 \renewcommand*\l@part[2]{%
2456   \ifnum \c@tocdepth >\m@ne
2457     \addpenalty{-\@highpenalty}%
2458     \vskip 1.0em \@plus\p@
2459     %\setlength\@tempdima{5em}%
2460     \settoheight\@tempdima{\large\bfseries \@partapp\space MM}%
2461     \vbox{%
2462       \pagerule
2463       \begingroup
2464         \parindent \z@ \rightskip \@pnumwidth
2465         \parfillskip -\@pnumwidth
2466         \leavevmode \large\bfseries
2467         \advance\leftskip\@tempdima
2468         \hskip -\leftskip
2469         \renewcommand*\numberline[1]{\hb@xt@ \@tempdima
2470           {\@partapp\space ##1\hfil }}%
2471         #1\nobreak\hfil \nobreak\hb@xt@ \@pnumwidth{\hss
2472           \normalfont\normalsize #2}\par
2473         \penalty\@highpenalty
2474       \endgroup
2475       \pagerule
2476     }%
2477 \fi}
```

`\l@chapter`

```
2478 \renewcommand{\l@chapter}[2]{%
2479   \ifnum\c@tocdepth>\m@ne
2480     \addpenalty{-\@highpenalty}%
2481     \vskip 1.0em \@plus \p@
2482     \setlength\@tempdima{2em}%
2483     \begingroup
2484       \parindent \z@
2485       \rightskip \@pnumwidth
2486       \parfillskip -\@pnumwidth
2487       \leavevmode \large \bfseries
2488       \advance \leftskip \@tempdima
2489       \hskip -\leftskip
2490       \renewcommand*\numberline[1]{\hb@xt@ \@tempdima
2491         {##1\hfil }}%
2492       #1\nobreak \hfil \nobreak \hb@xt@ \@pnumwidth {\hss
2493         \normalfont\normalsize #2}\par
2494       \penalty \@highpenalty
2495     \endgroup
2496 \fi
2497 }
```

`\l@papertitle`

```
2498 \newcommand*\l@papertitle[2]{%
```

```

2499 \ifnum \c@tocdepth >\m@ne
2500   \addpenalty{-\@highpenalty}%
2501   \vskip 1.0em \@plus\p@
2502   \setlength\@tempdima{3em}%
2503   \begingroup
2504     \leavevmode \raggedright\itshape
2505     #1\nobreak\hfill \nobreak\hb@xt@\@pnumwidth{\hss
2506       \normalfont#2}%
2507     \par
2508     \penalty\@highpenalty
2509   \endgroup
2510 \fi
2511 }

```

`\l@chapterauthor`

```

2512 \newcommand*\l@chapterauthor[2]{%
2513   \ifnum \c@tocdepth >\m@ne

2514     \begingroup
2515       \parindent \z@
2516       \rightskip \@pnumwidth
2517       \parfillskip -\@pnumwidth
2518       \leavevmode \raggedright
2519       \parbox{\linewidth-\@pnumwidth}{\raggedright#1\par}%
2520     \par
2521   \endgroup
2522 \fi}

```

`\l@section`

```

2523 \renewcommand*\l@section[2]{%
2524   \ifnum \c@tocdepth >\m@ne
2525     \addpenalty{-\@highpenalty}%
2526     \vskip 1.0em \@plus\p@
2527     \setlength\@tempdima{3em}%
2528     \begingroup
2529       \parindent \z@ \rightskip \@pnumwidth
2530       \parfillskip -\@pnumwidth
2531       \leavevmode \normalsize\mdseries
2532       \advance\leftskip\@tempdima
2533       \hskip -\leftskip
2534       #1\nobreak\hfil \nobreak\hb@xt@\@pnumwidth{\hss #2}\par
2535     \penalty\@highpenalty
2536   \endgroup
2537 \fi}

```

`\l@subsection`

```

2538 \renewcommand*\l@subsection[2]{%
2539   \ifnum \c@tocdepth >\m@ne
2540     \addpenalty{-\@highpenalty}%

```

```

2541 \vskip 1.0em \@plus\p@
2542 \setlength\@tempdima{3.5em}%
2543 \begingroup
2544 \parindent \z@ \rightskip \@pnumwidth
2545 \parfillskip -\@pnumwidth
2546 \leavevmode \normalsize\mdseries
2547 \advance\leftskip\@tempdima
2548 \hskip -\leftskip
2549 #1\nobreak\hfil \nobreak\hb@xt@\@pnumwidth{\hss #2}\par
2550 \penalty\@highpenalty
2551 \endgroup
2552 \fi}

```

`\chaptermark`

```

2553 \renewcommand*\chaptermark}[1]{%
2554 \mkboth{\curparthead}{\protect\thechapter. #1}%
2555 }

```

Set up page styles

`\firstpagehead`

```

2556 \newcommand{\firstpagehead}{}

```

`\firstpagefoot`

```

2557 \newcommand{\firstpagefoot}{%
2558 \@reprint\hfill\thepage
2559 }

```

`\headfont` Set the header font

```

2560 \newcommand*\headfont{\reset@font\small\scshape}%

```

`\footfont` Set the footer font

```

2561 \newcommand*\footfont{\reset@font\small\itshape}%

```

`\ps@chplain` Page style for first page of a chapter

```

2562 \newcommand*\ps@chplain{%
2563 \let\mkboth@gobbletwo
2564 \renewcommand*\@oddhead{\headfont\firstpagehead}%
2565 \renewcommand*\@evenhead{}%
2566 \renewcommand*\@oddfont{\footfont\firstpagefoot}%
2567 \renewcommand*\@evenfoot{\footfont\thepage\hfill
2568 }%
2569 }
2570 \let\ps@plain\ps@chplain

```

`\ps@article` Page style for the imported articles.

```

2571 \newcommand*\ps@article{%
2572 \let\mkboth@gobbletwo

```

```

2573 \renewcommand*{\@oddhead}{\headfont\hfill\@shorttitle}%
2574 \renewcommand*{\@evenhead}{\headfont\@shortauthor\hfill}%
2575 \renewcommand*{\@oddfoot}{\footfont\hfill\thepage}
2576 \renewcommand*{\@evenfoot}{\footfont\thepage\hfill}
2577 }

```

`\ps@articlet` Title page style for imported articles (imported using `\importarticle`)

```

2578 \newcommand*{\ps@articlet}{%
2579 \let\@mkboth\@gobbletwo
2580 \renewcommand*{\@oddhead}{}%
2581 \renewcommand*{\@evenhead}{}%
2582 \renewcommand*{\@oddfoot}{\footfont\hfill\thepage}
2583 \renewcommand*{\@evenfoot}{\footfont\thepage\hfill}
2584 }

```

`\ps@jmlrbook` Page style for book

```

2585 \newcommand*{\ps@jmlrbook}{%
2586 \renewcommand*{\@oddfoot}{\footfont\hfill\thepage}
2587 \renewcommand*{\@evenfoot}{\footfont\thepage\hfill}
2588 \def\@evenhead{\headfont\leftmark\hfill}%
2589 \def\@oddhead{\hfill\headfont\rightmark}%
2590 \let\@mkboth\markboth
2591 \renewcommand*{\sectionmark}[1]{}%
2592 }

```

`\markleft` Provide a command to set just the left header mark.

```

2593 \newcommand*{\markleft}[1]{%
2594 \begingroup
2595 \let\label\relax
2596 \let\index\relax
2597 \let\glossary\relax
2598 \expandafter\@markleft\@themark{#1}%
2599 \@temptokena
2600 \expandafter{\@themark}%
2601 \mark{\the\@temptokena}
2602 \endgroup
2603 \if@nobreak
2604 \ifvmode
2605 \nobreak
2606 \fi
2607 \fi
2608 }
2609 \newcommand*{\@markleft}[3]{%
2610 \@temptokena{#2}%
2611 \unrestored@protected@xdef\@themark{#3}{\the\@temptokena}}
2612 }

```

`morefrontmatter`

```

2613 \renewcommand*{\morefrontmatter}{\pagestyle{jmlrbook}}%

```

```

2614 \def\chaptermark##1{%
2615   \@mkboth{##1\hfill}{\hfill##1}}%
2616 }

```

\moremainmatter

```

2617 \renewcommand*\moremainmatter{\pagestyle{jmlrbook}}%
2618 \def\chaptermark##1{%
2619   \@mkboth{\@curparthead}{\protect\thechapter. ##1}%
2620 }%
2621 }

```

\bibsection Set the bibliography headings in the articles

```

2622 \renewcommand*\bibsection{\section*\refname}

```

Set up the book commands:

```

2623 \jmlrbookcommands

```

In the event that authors have used different versions of algorithm2e, define old command names.

```

2624 \providecommand*\SetNoLine{\SetAlgoNoLine}
2625 \providecommand*\SetVline{\SetAlgoVlined}
2626 \providecommand*\Setvlineskip{\SetVlineSkip}
2627 \providecommand*\SetLine{\SetAlgoLined}
2628 \providecommand*\dontprintsemicolon{\DontPrintSemicolon}
2629 \providecommand*\printsemicolon{\PrintSemicolon}
2630 \providecommand*\incmargin{\IncMargin}
2631 \providecommand*\decmargin[1]{\DecMargin{-#1}}
2632 \providecommand*\setnlskip{\SetNlSkip}
2633 \providecommand*\Setnlskip{\SetNlSkip}
2634 \providecommand*\setalcapskip{\SetAlCapSkip}
2635 \providecommand*\setalcaphskip{\SetAlCapHSkip}
2636 \providecommand*\nlsty{\NlSty}
2637 \providecommand*\Setnlsty{\SetNlSty}
2638 \providecommand*\linesnumbered{\LinesNumbered}
2639 \providecommand*\linesnotnumbered{\LinesNotNumbered}
2640 \providecommand*\linesnumberedhidden{\LinesNumberedHidden}
2641 \providecommand*\showln{\ShowLn}
2642 \providecommand*\showlnlabel{\ShowLnLabel}
2643 \providecommand*\nocaptionofalgo{\NoCaptionOfAlgo}
2644 \providecommand*\restorecaptionofalgo{\RestoreCaptionOfAlgo}
2645 \providecommand*\restylealgo{\RestyleAlgo}
2646 \providecommand*\titleofalgo{\TitleOfAlgo}

```

# Change History

1.06 (2010-06-17)	
\iftablecaptiontop: new .....	48
1.07 (2010-06-30)	
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1.08 (2010-07-27)	
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\footnoteseptext: new .....	54
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marker in the footnote text so that it is	
raised and isn't followed by a full stop	56
1.09 (2010/12/01)	
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\booktocpreamble: new .....	72
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\centering... \par .....	54
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\importarticle: Added \label to	
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\jmlrpreauthor: added \nametag ....	58
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document hook to avoid problems	
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	commands etc .....
	98
	\nametag: new .....
	58
	\reprint: new .....
	62
	\subfigure: Added check to determine
	whether the subfigure caption is wider
	than the subfigure .....
	40
	\subtable: Added check to determine
	whether the subtable caption is wider
	than the subtable .....
	42
1.10 (2011-01-05)	
General: Added 10pt, 11pt and 12pt	
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passed \pt@size when loading article	
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\bookpart: set \toclevel@part .....	73
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\addr .....	58
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\thanks: Modified definition of \thanks	54
1.11 (2011-03-24)	
General: added old algorithm2e	
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\jmlrwcpc: Fixed typo .....	50
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\prefacename: new .....	87
preface: new .....	86
1.12 (2012/01/05)	
\@jmlr@authors: new .....	65
\@shorttitle: provided default value ..	55

General: changed <code>\newcommand</code> to	1.16 (2012/05/15)
<code>\providecommand</code> .....	80
removed class option <code>prehyperref</code> ....	48
<code>\artappendix</code> : added chapter to	
<code>\theHsection</code> to ensure unique	
hyperlink names in book .....	69
<code>\importarticle</code> : changed	
<code>\@jmlrauthors</code> to <code>\@jmlr@authors</code>	103
changed <code>\@shorttitle</code> to <code>\@title</code> .	103
<code>\importpaper</code> : changed <code>\@jmlrauthors</code>	
to <code>\@jmlr@authors</code> .....	101, 102
changed <code>\@shorttitle</code> to <code>\@title</code> .	101
<code>\importpubpaper</code> : changed	
<code>\@jmlrauthors</code> to <code>\@jmlr@authors</code>	100
changed <code>\@shorttitle</code> to <code>\@title</code> .	100
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