

The `tmj` package*

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1 Introduction

The `tmj` package is provided for authors of articles to appear in the journal "Tbilisi Mathematical Journal", published by Amsterdam University Press. It was written by Joel Uckelman. Deviations from standard \LaTeX are few and noted below.

2 Usage

2.1 Frontmatter

2.1.1 Document class and required packages

The `tmj` package is intended for use with the `book` document class. `tmj` loads the following packages: `amsthm`, `amssymb`, `geometry`, `lastpage`, and `hyperref`. If you want to add other packages, load them before the `\usepackage{tmj}` line. Please use as few packages as possible, and use them only if absolutely necessary. This means that your paper should begin with the following lines:

```
\documentclass{book}
\usepackage{<your packages>}
\usepackage{tmj}
```

2.1.2 Title & author information

The following commands are provided for specifying title and author information to be placed in the title block of your article:

```
\title{<short title>}{<full title>}
\author{<short name>}{<full name>}
\address{<author's address>}
\email{<email address>}
```

The short form of the author's name will appear in the running heads on even pages of the article, while the short form of the article's title will appear on odd

*This document corresponds to `tmj` v3.1, dated 2007/12/14.

pages. Please include your first name in the full name, and use initials in the short name (see example below).

Line breaks (`\`) may appear in the full title, full name, author's address and email address, as necessary. `\thanks{text}` may appear in the full name argument of `\author`. For articles with multiple authors, give full names separated by `\and` and short names separated by commas. Separate multiple addresses by `\and`, and reference addresses using `\addr{number}`.

Please enter your address in the format

```
<Address> \  
<University> \  
<Postal Address> \  
<City & ZIP Code>, <Country>
```

adding additional lines if necessary and appropriate. Please use the full name of your institute (no abbreviations) and the official name of your university (in the example below, "Rheinische Friedrich-Wilhelms-Universität Bonn" instead of "Universität Bonn"). Do not translate the name of your institute and university unless the original name uses a different alphabet. As an example, the following code

```
\title{An Example Paper}  
  {An Example Paper for the \texttt{tmj} Documentation}  
\author{B.~L"owe, J.~Uckelman}  
  {Benedikt L"owe\addr{1,2} \and Joel Uckelman\addr{1}}  
\address{Institute for Logic, Language and Computation \  
  Universiteit van Amsterdam,  
  Plantage Muidergracht 24,  
  1018 TV Amsterdam, The Netherlands  
  \and  
  Mathematisches Institut,  
  Rheinische Friedrich-Wilhelms-Universit"at Bonn,  
  Beringstra{\ss}e 1,  
  53115 Bonn, Germany}  
\email{\{bloewe,juckelma\}@illc.uva.nl}
```

produces the following in the title block:

An Example Paper for the tmj Documentation

Benedikt Löwe^{1,2}, Joel Uckelman¹

¹ Institute for Logic, Language and Computation, Universiteit van Amsterdam, Plantage Muidergracht 24, 1018 TV Amsterdam, The Netherlands

² Mathematisches Institut, Rheinische Friedrich-Wilhelms-Universität Bonn, Beringstraße 1, 53115 Bonn, Germany

E-mail: {bloewe,juckelma}@illc.uva.nl

`\title`, `\author`, `\address`, and `\email` must be specified *prior* to the `\maketitle` command, since `\maketitle` uses the values specified there to construct the title block, table of contents entry and bibliographic information in the footer of the title page.

2.1.3 Received & Accepted

The package expects the following command block before the `\begin{document}` command:

```
\received{} \revised{} \accepted{}  
\volumenumber{?}\volumeyear{????}
```

Please leave these fields empty. They will be filled in by the editorial office.

2.1.4 Macros

Please enter your personal macros after the title and author information and before `\begin{document}`. Please include only macros that you are actually using.

2.2 Sectioning

2.2.1 The `\maketitle` command

The `\maketitle` command is used right after `\begin{document}` to create the title block for your article, and takes no arguments. It should appear in your article exactly once. `\maketitle` also sets up the running heads and inserts the article into the Table of Contents, using the information provided in `\title`, `\author`, `\address`, and `\email`.

2.2.2 The abstract environment

Put your abstract in the `abstract` environment, following the `\maketitle` command. Usage is unchanged from the `article` class.

2.2.3 The `\metadata` command

After the abstract, add the `\metadata` command for the 2000 AMS Subject Classification and keywords. The command has three parameters, for the primary subject classification, the secondary subject classification, and the keywords, respectively.

```
\metadata{00A00}{03E05 03E10}{Sets, ordinals, cardinals}
```

2.2.4 The `\part` & `\chapter` commands

Do not use `\part` or `\chapter` in your article. They are reserved for higher-level structure of volumes.

2.2.5 `\section` & co.

All subchapter sectioning commands (`\section`, `\subsection`, `\subsubsection`, `\paragraph`, `\subparagraph`, and their starred versions) may be used as usual.

2.2.6 References

A bibliography may be produced in the standard way with the `thebibliography` environment and `\bibitem` command.

2.2.7 Appendices

Put appendices after the references. Use the `\appendix` command to switch to appendix numbering. For a single unlettered appendix, called “Appendix”, use `\section*{Appendix}`. For multiple appendices, called “Appendix A”, “Appendix B”, ..., begin each appendix with `\nextappendix\section{}`.

2.3 Displayed Text

2.3.1 Theorem-like environments

Using the `amsthm` package, we have defined the following theorem-like environments:

<code>assumption</code>	<code>criterion</code>	<code>problem</code>
<code>axiom</code>	<code>definition</code>	<code>proposition</code>
<code>case</code>	<code>example</code>	<code>remark</code>
<code>claim</code>	<code>exercise</code>	<code>solution</code>
<code>conclusion</code>	<code>fact</code>	<code>subclaim</code>
<code>condition</code>	<code>lemma</code>	<code>summary</code>
<code>conjecture</code>	<code>notation</code>	<code>remark</code>
<code>convention</code>	<code>note</code>	<code>theorem</code>
<code>corollary</code>	<code>observation</code>	

Please use these. By default, all theorem-like environments are numbered by section and sequentially in the same series. That is, Theorem 3.43 will follow Observation 3.42.

If your article requires some theorem-like environment not defined here, you may define new ones using `\newtheorem{<envname>}[<counter>]{<label>}`. For example, `\newtheorem{garbage}[theorem]{Garbage}` will define a `garbage` environment, instances of which will be numbered in sequence with the theorems.

Every theorem-like environment takes an optional argument which can be used to supply an annotation. E.g., this code

```
\begin{theorem}[Fermat]
  For integers  $n > 2$ , the equation  $a^n + b^n = c^n$ 
  has no nonzero integer solutions.
\end{theorem}
```

will produce

Theorem 2.1 (Fermat). For integers $n > 2$, the equation $a^n + b^n = c^n$ has no nonzero integer solutions.

Our standard numbering is by section. If you wish to have one numbering for the entire article (not resetting at the begin of each section), please use the command `\numberingbyarticle`. This has to be done for articles without sections, and could also be useful for other short articles. The theorem label for the above example would then read “**Theorem 1 (Fermat)**.”, assuming that there are no theorem-like environments before it.

For more advanced usage of theorem-like environments, please see the documentation for the `amsthm` package.

2.3.2 Proof environments

The `proof` and `proofof` environments may be used for enclosing proofs:

```
\begin{proof}[\langle label \rangle] ... \end{proof}
\begin{proofof}[\langle label \rangle]{\langle qedlabel \rangle} ... \end{proofof}
```

In both cases, the optional $\langle label \rangle$ defaults to *Proof* if not specified. The `proofof` environment extends `proof` by offering a labelled Q.E.D. at the end of the proof.

This code:

```
\begin{proof}Omitted due to space constraints.\end{proof}
\begin{proof}[Proof of Lemma] Suppose that\ldots\end{proof}
\begin{proof}[Proof (Sketch)] The idea is that\ldots\end{proof}
\begin{proofof}{Theorem 1}Proceed by induction\ldots\end{proofof}
\begin{proofof}[Proof of Claim]{Claim}This proves the claim.\end{proofof}
```

produces the following:

Proof. Omitted due to space constraints. Q.E.D.

Proof of Lemma. Suppose that... Q.E.D.

Proof (Sketch). The idea is that... Q.E.D.

Proof. Proceed by induction... Q.E.D. (Theorem 1)

Proof of Claim. This proves the claim. Q.E.D. (Claim)

For more advanced usage of the `proof` environment, please see the documentation for the `amsthm` package.

2.4 Tables and figures

Please use the `table` and `figure` environments for your tables and figures. Tables and figures are numbered each with their own counter, which resets at the start of every article. If there are n tables and m figures in article, they will be numbered $1, \dots, n$ and $1, \dots, m$, respectively.

2.5 Replaced symbols

The symbols \emptyset , ϕ , and ϵ have been replaced by \varnothing , φ , and ε . The originals are now produced by `\origemptyset`, `\origphi`, and `\origepsilon`, respectively.

2.6 Everything else

Anything not mentioned here is unchanged usage-wise from standard L^AT_EX.

3 Implementation

This is the implementation of the tmj package. It is rather ugly at present. Suggestions for improvement are welcome.

```
1
2 % zap linebreaks
3 \newcommand{\OneLine}[1]{%
4   \begingroup
5     \def\{\unskip}\space\ignorespaces}%
6     #1%
7   \endgroup}
8
9 % useful for galley proofs
10 % \RequirePackage{vruler}
11 % \setvruler[] [] [] [] [] [1.5em]
12
13 %
14 % no headers on left-side pages following
15 % articles which end on right-side pages
16 %
17 \newcommand{\clearemydoublepage}%
18   {\newpage\thispagestyle{empty}\cleardoublepage}
19
20 %
21 % we get better spacing on pages this way
22 %
23 \raggedbottom
24
25 %
26 % frontmatter, mainmatter, backmatter
27 %
28 \renewcommand\frontmatter{\clearemydoublepage%
29   \@mainmatterfalse
30   \pagestyle{headings}
31   \pagenumbering{arabic}}
32
33 \renewcommand\mainmatter{\clearemydoublepage%
34   \@mainmattertrue
35   \pagestyle{headings}}
36
37 \renewcommand\backmatter{\clearemydoublepage%
38   \@mainmatterfalse}
39
40
41 %
42 % title header
43 %
44 \newif\iftitle
45 \renewcommand{\thanks}[1]{%
46   \iftitle{%
47     \renewcommand{\thefootnote}{\fnsymbol{footnote}}%
48     \footnote{#1}%
49     \renewcommand{\thefootnote}{\arabic{footnote}}}%
50   \else\null\fi}
```

```

51
52 \renewcommand{\title}[2]{%
53   \gdef\@title{\OneLine{#2}}
54   \gdef\@titledisplay{#2}
55   \gdef\@shorttitle{#1}
56 }
57 \def\@title{}
58 \def\@titledisplay{}
59 \def\@shorttitle{}
60
61 \newcounter{@ShowAddrLabel}
62 \setcounter{@ShowAddrLabel}{0}
63
64 \renewcommand{\author}[2]{%
65   \def\and{\unskip}\ignorespaces{, }}
66   \def\addr##1{\unskip}\ignorespaces\ifTitle{$^{##1}$}\else\null\fi
67   \protect\setcounter{@ShowAddrLabel}{1}}
68   \gdef\@author{#2}
69   \gdef\@shortauthor{#1}
70 }
71 \def\@author{}
72 \def\@shortauthor{}
73
74 \newcounter{@addr}
75 \newcommand{\address}[1]{%
76   \setcounter{@addr}{1}
77   \gdef\@address{%
78     \ifnum\the@ShowAddrLabel >0{%
79       \def\and{\[2mm]\stepcounter{@addr}$^{\the@addr}$\enspace\ignorespaces}
80       $\the@addr$\enspace\ignorespaces #1}
81     \else{%
82       \def\and{\[2mm]\ignorespaces}
83       #1}
84     \fi
85   }
86 }
87 \def\@address{}
88
89 \newcommand{\email}[1]{\gdef \@email{\[1mm] E-mail: \texttt{#1}}}
90 \def\@email{}
91
92 \renewcommand{\maketitle}{%
93   \clearemydoublepage
94   \label{FirstPage}
95   \Titletrue
96   \refstepcounter{chapter}
97   \thispagestyle{copy}%
98   \begin{group}
99     \parindent 0pt
100    \begin{center}
101      {\Large\textbf{\@titledisplay}}
102
103    }
104    \vspace{5mm}

```

```

105     {\large\@author}
106     \end{center}
107     \fontsize{8}{9}\selectfont\@address
108     \@email\par
109     \nobreak
110 \endgroup
111 \vspace*{10pt}
112 \@thanks
113 \setcounter{footnote}{0}
114 \Titlefalse
115 \addcontentsline{toc}{chapter}{\@title\protect\ \emph{\@author}}
116 \main
117 \renewcommand{\leftmark}{\@shortauthor}
118 \renewcommand{\rightmark}{\@shorttitle}
119 }
120
121 %
122 % copyright slug
123 %
124 \newif\ifCollection
125
126 \def\publisher#1{\gdef\@publisher{#1}}
127 \def\@publisher{}
128
129 \def\seriestitle#1{\gdef\@seriestitle{#1}}
130 \def\@seriestitle{}
131
132 \def\editor#1{\gdef\@editor{#1}}
133 \def\@editor{}
134
135 \def\volumetitle#1{\gdef\@volumetitle{#1}}
136 \def\@volumetitle{}
137
138 \def\volumetitlesep#1{\gdef\@volumetitlesep{#1}}
139 \def\@volumetitlesep{}
140
141 \def\volumesubtitle#1{\gdef\@volumesubtitle{#1}}
142 \def\@volumesubtitle{}
143
144 \def\volumeyear#1{\gdef\@volumeyear{#1}}
145 \def\@volumeyear{}
146
147 \def\volumenumber#1{\gdef\@volumenumber{#1}}
148 \def\@volumenumber{}
149
150 % FIXME: Will there ever be single-page articles? Maybe.
151
152 \def\CopyrightContent{%
153 {\parbox[t]{\textwidth}{%
154 \scriptsize \textbf{Tbilisi Mathematical Journal}
155 \@volumenumber{} (\@volumeyear),
156 pp. ~\pageref{FirstPage}--\pageref{LastPage}.\}
157 National Centre for Science and Technology \& Amsterdam University
158 Press.\}[1mm]

```



```

159 {\tiny \if!\@received!\else{\textsl{Received by the editors:}}
160 \@received}\fi
161 \if!\@revised!\else{; \@revised}\fi\if!\@received!\else{.}\fi\
162 \if!\@accepted!\else{\textsl{Accepted for publication:}} \@accepted.}\fi
163
164 }}}}
165
166
167 %
168 % running heads
169 %
170 \def\ps@copy{%
171     \def\@oddfoot{\CopyrightContent}%
172     \def\@evenfoot{\CopyrightContent}%
173     \let\@evenhead\@empty%
174     \let\@oddhead\@empty}
175
176 \def\ps@headings{%
177     \let\@oddfoot\@empty%
178     \let\@evenfoot\@empty%
179     \def\@evenhead{\fontsize{8}{9}\selectfont%
180         \thepage\hfil\leftmark}%
181     \def\@oddhead{\fontsize{8}{9}\selectfont%
182         \rightmark\hfil\thepage}}
183
184 \pagestyle{headings}
185
186 %
187 % theorem-like environments
188 %
189 \newtheoremstyle{tlg}%           name
190     {\topsep}%                 space above
191     {\topsep}%                 space below
192     {\rm}%                     body text
193     {}%                         indent
194     {\bfseries}%               head text
195     {.%}                        punctuation after head
196     {0.5em}%                   space after head
197     {}%                         head spec
198
199 \theoremstyle{tlg}
200
201 \newtheorem{theorem}{Theorem}[section]
202
203 \newtheorem{assumption}[theorem]{Assumption}
204 \newtheorem{axiom}[theorem]{Axiom}
205 \newtheorem{case}[theorem]{Case}
206 \newtheorem{claim}[theorem]{Claim}
207 \newtheorem{conclusion}[theorem]{Conclusion}
208 \newtheorem{condition}[theorem]{Condition}
209 \newtheorem{conjecture}[theorem]{Conjecture}
210 \newtheorem{convention}[theorem]{Convention}
211 \newtheorem{corollary}[theorem]{Corollary}
212 \newtheorem{criterion}[theorem]{Criterion}

```

```

213 \newtheorem{definition}[theorem]{Definition}
214 \newtheorem{example}[theorem]{Example}
215 \newtheorem{exercise}[theorem]{Exercise}
216 \newtheorem{fact}[theorem]{Fact}
217 \newtheorem{lemma}[theorem]{Lemma}
218 \newtheorem{notation}[theorem]{Notation}
219 \newtheorem{note}[theorem]{Note}
220 \newtheorem{observation}[theorem]{Observation}
221 \newtheorem{problem}[theorem]{Problem}
222 \newtheorem{proposition}[theorem]{Proposition}
223 \newtheorem{question}[theorem]{Question}
224 \newtheorem{remark}[theorem]{Remark}
225 \newtheorem{solution}[theorem]{Solution}
226 \newtheorem{subclaim}[theorem]{Subclaim}
227 \newtheorem{summary}[theorem]{Summary}
228
229 \renewcommand\thetheorem{\thesection.\arabic{theorem}}
230
231 \def\@removefromreset#1#2{%
232   \expandafter\let\csname c@#1\endcsname\@removefromreset
233   \def\@elt##1{%
234     \expandafter\ifx\csname c@##1\endcsname\@removefromreset
235     \else
236       \noexpand\@elt{##1}%
237     \fi}%
238   \expandafter\xdef\csname cl@#2\endcsname{%
239     \csname cl@#2\endcsname}}
240
241 \newcommand{\numberbyarticle}{%
242   \@removefromreset{theorem}{section}
243   \renewcommand\thetheorem{\arabic{theorem}}}
244
245 %
246 % proof environments
247 %
248 \renewcommand{\qedsymbol}{\footnotesize\textsc{q.e.d.}}
249 \let\origqedsymbol\qedsymbol
250
251 \newenvironment{proofof}[2][Proof]%
252   {\begingroup
253     \renewcommand{\qedsymbol}{\footnotesize\origqedsymbol\ (#2)}}
254   {\begin{proof}[#1]}
255   {\end{proof}\endgroup}
256
257 %
258 % table of contents
259 %
260 \renewcommand\contentsname{Table of Contents}
261
262 \renewcommand{\tableofcontents}{%
263   \clearemptydoublepage
264   \thispagestyle{empty}
265   \begingroup
266     \vspace*{1em}

```

```

267     \parindent Opt
268     \hrulefill \linebreak \null \vspace{-8pt}\par
269     {\Large\bfseries\contentsname
270
271     }
272     \nobreak
273     \hrulefill \linebreak \null \vspace{-8pt}\par
274 \endgroup
275 \vskip3\baselineskip
276 \@starttoc{toc}
277 \pagestyle{headings}
278 \markboth{\contentsname}{\contentsname}
279 \clearemptydoublepage
280 }
281
282 %
283 % part
284 %
285 % FIXME: add part code
286
287 %
288 % chapter
289 %
290 \def\@makechapterhead#1{%
291     \thispagestyle{empty}
292     \vspace*{1em}
293     \begingroup
294         \parindent Opt
295         \hrulefill \linebreak \null \vspace{-8pt}\par
296         \ifnum \c@secnumdepth >\m@ne
297             \if@mainmatter
298                 {\Large\bfseries \@chapapp\space \thechapter}
299
300             }
301         \fi
302     \fi
303     \interlinepenalty\@M
304     {\Large\bfseries #1
305
306     }
307     \nobreak
308     \hrulefill \linebreak \null \vspace{-8pt}\par
309 \endgroup
310 \vskip 40\p@
311 \renewcommand{\leftmark}{\@chapapp\space \thechapter}
312 \renewcommand{\rightmark}{#1}
313 }
314
315 \def\@makeschapterhead#1{%
316     \thispagestyle{empty}
317     \vspace*{1em}
318     \begingroup
319         \parindent Opt
320         \hrulefill \linebreak \null \vspace{-8pt}\par

```

```

321     {\Large\bfseries #1
322
323     }
324     \nobreak
325     \hrulefill \linebreak \null \vspace{-8pt}\par
326 \endgroup
327 \vskip 40\p@
328 \renewcommand{\leftmark}{#1}
329 \renewcommand{\rightmark}{#1}
330 }
331
332 \def\l@chapter#1#2{\addpenalty{-\@highpenalty}%
333 \vskip 1.0em plus\p@
334 \@tempdima 1.5em
335 \begingroup
336 \parindent \z@ \rightskip \@pnumwidth
337 \parfillskip -\@pnumwidth
338 \leavevmode
339 #1 \dotfill #2\par
340 \penalty\@highpenalty
341 \endgroup}
342
343 %
344 % set the section numbering depth
345 %
346 \setcounter{secnumdepth}{5}
347
348 %
349 % section
350 %
351 \def\thesection{\arabic{section}} % blow away chapter numbers
352
353 \def\section{\@startsection{section}{1}{\z@}%
354                 {-2ex plus -.5ex minus -.2ex}%
355                 {.8ex plus .08ex}%
356                 {\raggedright\large\bf}}
357 %
358 % subsection
359 %
360 \def\subsection{\@startsection{subsection}{2}{\z@}%
361                 {-1.5ex plus -.25ex minus -.1ex}%
362                 {.6ex plus .06ex}%
363                 {\raggedright\normalsize\bf}}
364
365 %
366 % subsubsection
367 %
368 \def\subsubsection{\@startsection{subsubsection}{3}{\z@}%
369                 {-1ex plus -.15ex minus -.06ex}%
370                 {.4ex plus .04ex}%
371                 {\raggedright\normalsize\bf}}
372
373 %
374 % paragraph

```

```

375 %
376 \def\paragraph{\@startsection{paragraph}{4}{\z@}%
377     {.5ex plus .05ex minus .025ex}%
378     {-.66em}%
379     {\normalsize\bf}}
380
381 %
382 % subparagraph
383 %
384 \def\subparagraph{\@startsection{subparagraph}{5}{\parindent}%
385     {.25ex plus .01ex minus .005ex}%
386     {-.66em}%
387     {\normalsize\bf}}
388
389 %
390 % appendix
391 %
392 \renewcommand\appendix{
393 \newcounter{appsection}
394 \setcounter{appsection}{1}
395 \begin{center}{\Large
396 \textbf{Appendix}}\end{center}
397 \gdef\thesection{\@Alph\c@appsection}
398 \newcommand{\nextappendix}{\stepcounter{appsection}}
399 }
400
401 \newcommand\main{\par
402 \gdef\thesection{\@arabic\c@section}}
403
404 %
405 % tables and figures
406 %
407 %\@addtoreset{figure}{article}
408 \renewcommand\thefigure{\arabic{figure}}
409
410 %\@addtoreset{table}{article}
411 \renewcommand\thetable{\arabic{table}}
412
413 %
414 % bibliography
415 %
416 \renewcommand{\bibname}{References}
417
418 \renewenvironment{thebibliography}[1]{%
419 \vskip1cm
420 \section*{\bibname}%
421 \list{\@biblabel{\@arabic\c@enumiv}}%
422     {\settowidth\labelwidth{\@biblabel{#1}}%
423     \leftmargin\labelwidth
424     \advance\leftmargin\labelsep
425     \@openbib@code
426     \usecounter{enumiv}%
427     \let\p@enumiv\@empty
428     \renewcommand\theenumiv{\@arabic\c@enumiv}}%

```

```

429 \sloppy
430 \clubpenalty4000
431 \@clubpenalty \clubpenalty
432 \widowpenalty4000%
433 \sfcode'\.\@m}
434 {\def\@noitemerr
435   {\@latex@warning{Empty 'thebibliography' environment}}}%
436 \endlist}
437
438 %
439 % received, revised, accepted
440 %
441 \newcommand\receivedtext{%
442   \bigskip\noindent
443   \begingroup
444     \if!\@received!\else{\scriptsize Received: \@received}\[-.3em] \fi
445     \if!\@revised!\else{\scriptsize Revised: \@revised}\[-.3em] \fi
446     \if!\@accepted!\else{\scriptsize Accepted: \@accepted} \fi
447   \endgroup
448 }
449
450 \def\received#1{\gdef\@received{#1}}
451 \def\revised#1{\gdef\@revised{#1}}
452 \def\accepted#1{\gdef\@accepted{#1}}
453
454 %
455 % abstract
456 %
457 \newcommand\abstractname{Abstract}
458
459 \newenvironment{abstract}{%
460   \small
461   \begin{center}%
462     {\bfseries \abstractname\vspace{-.5em}\vspace{\z@}}%
463   \end{center}%
464   \quote}
465   {\endquote}
466
467 \newcommand{\metadata}[3]
468 {\{\scriptsize
469 \vspace{3mm}
470 \noindent\textsl{2000 Mathematics Subject Classification.} \textbf{#1}. #2.\ \ \textsl{Keywords}
471 \vspace{3mm}
472
473 }}
474
475
476 %
477 % caption
478 %
479 \long\def\@makecaption#1#2{%
480   \vskip 10\p@
481   \setbox\@tempboxa\hbox{\textsc{#1.} #2}%
482   \ifdim \wd\@tempboxa >\hsize

```

```

483     \textsc{#1.} #2\par
484     \else
485     \hbox to\hsize{\hfil\box\@tempboxa\hfil}%
486     \fi}
487
488 %
489 % quote, quotation
490 %
491 \renewenvironment{quotation}%
492     {\list{}}%
493         {\listparindent 1.5em%
494         \itemindent \listparindent
495         \rightmargin \leftmargin
496         \parsep \z@ \@plus\p@}%
497     \small%
498     \item\relax}%
499     {\endlist}
500 \renewenvironment{quote}%
501     {\list{}}%
502         {\rightmargin\leftmargin}%
503     \small%
504     \item\relax}%
505     {\endlist}
506
507 %
508 % lists
509 %
510 \renewcommand{\labelitemi}{\small\textbullet}
511
512 %
513 % various characters for which the defaults are ugly
514 %
515 \let\origemptyset\emptyset
516 \let\emptyset\varnothing
517 \let\origphi\phi
518 \let\phi\varphi
519 \let\origepsilon\epsilon
520 \let\epsilon\ varepsilon
521

```

The End.