

A L^AT_EX document class for the Revista Mexicana de Astronomía y Astrofísica*

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Abstract This document describes the `rmaa` L^AT_EX document class for the journal “Revista Mexicana de Astronomía y Astrofísica”. The macros can be used for

1. Preparing author manuscripts for the journal (including conference proceedings to be published in the “Serie de Conferencias”)
2. Typesetting an entire volume of the journal by inputting the individual article files from a container file. Facilities are included for automatic generation of TOC and Author Index.

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1 The documentation driver file

This is the part that generates the documentation that you may or may not be reading, which is done with the help of the Makefile discussed in section 4.1.

```

1 \driver
2 \documentclass{ltxdoc}
3 \usepackage{hyperref}
4 \usepackage{palatino}
5 \EnableCrossrefs \CodelineIndex \RecordChanges
6 \setlength{\parindent}{0pt}
7 \def\MacroFont{\footnotesize\tt}
8 \begin{document} \DocInput{rmaa.dtx} \PrintIndex \PrintChanges \end{document}
9 \driver

```

2 The implementation

```

10 \package
11 \newcommand{\rmaa@version}{3.24}
12 \newcommand{\rmaa@date}{2007/09/14}
13 \newcommand{\rmVersion}{\rmaa@version}
14 \newcommand{\rmDate}{\rmaa@date}
15 \NeedsTeXFormat{LaTeX2e}[1995/06/01]

16 \ProvidesClass{rmaa}[\rmaa@date\space v\rmaa@version\space RevMexAA article
17 class]

```

2.1 Option Handling

Declarations that are needed in options

```

18 \newif\if@proof
19 \@prooffalse
20 \newif\if@journal
21 \@journaltrue
22 \newif\if@printdates
23 \@printdatesfalse
24 \newif\if@proceedings
25 \@proceedingsfalse

```

```

26 \newif\if@manuscript
27 \@manuscripttrue
28 \newif\if@guide
29 \@guidefalse
30 \newif\if@preprint
31 \@preprintfalse
32 \newif\if@rmtwocol
33 \@rmtwocoltrue
34 \newif\if@biblist
35 \@biblistfalse
36 \newif\if@book
37 \@bookfalse
38 \newif\if@natbib
39 \@natbibtrue
40 \newif\if@rmc cite
41 \@rmc citefalse
42 \newif\if@titlevisible
43 \@titlevisibletrue
44 \newif\if@abstractpresent
45 \@abstractpresentfalse
46 \newif\if@printbanner
47 \@printbannerfalse
48 \newif\if@suppressfulladdresses
49 \@suppressfulladdressesfalse
50 \newif\if@newstyle
51 \@newstylefalse
52 \newif\if@debug
53 \@debugfalse
54 \newif\if@boldkeywords
55 \@boldkeywordsfalse

```

The option handling—mainly setting various booleans.

```

56 \DeclareOption{manuscript}{\typeout{Manuscript for referee}
57   \@manuscripttrue\@journalfalse\@rmtwocolfalse
58   \PassOptionsToClass{10pt}{article}}
59 \DeclareOption{journal}{\typeout{Main journal option}%
60   \@journaltrue\@rmtwocoltrue\@printdatestrue\@manuscriptfalse
61   \PassOptionsToClass{10pt}{article}}
62 \DeclareOption{guide}{\typeout{User guide option}%
63   \@guidetrue\@journalfalse\@rmtwocoltrue\@manuscriptfalse
64   \PassOptionsToClass{10pt}{article}}
65 \DeclareOption{preprint}{\typeout{Preprint option}%
66   \@preprinttrue\@manuscriptfalse\PassOptionsToClass{10pt}{article}}
67 \DeclareOption{proof}{\typeout{Author proof option}%
68   \@prooftrue\@manuscriptfalse}
69 \DeclareOption{proceedings}{\typeout{Proceedings option}%
70   \@proceedingstrue\@journalfalse\@rmtwocoltrue\@newstyletrue
71   \@suppressfulladdressestrue}
72   \@printdatesfalse\@manuscriptfalse\PassOptionsToClass{10pt}{article}}
73 \DeclareOption{printdates}{\typeout{Force printing of received/accepted dates}%
74   \@printdatestrue}
75 \DeclareOption{book}{\typeout{Whole issue option}%
76   \@booktrue}
77 \DeclareOption{nonatbib}{\typeout{Turn off natbib support (required
78   for compatibility with old rmaacite package).}%
79   \@natbibfalse}
80 \DeclareOption{newstyle}{\typeout{Use new layout style}%
81   \@newstyletrue}
82 \DeclareOption{oldstyle}{\typeout{Use old layout style}%
83   \@newstylefalse}
84 \DeclareOption{debug}{\typeout{Loads of annoying messages}%
85   \@debugtrue}

```

These two need to be declared explicitly so that `\ExecuteOptions` actually does something.

```
86 \DeclareOption{twocolumn}{\@rmtwocoltrue}
87 \DeclareOption{onecolumn}{\@rmtwocolfalse}
88 \DeclareOption{twoside}{\PassOptionsToClass{\CurrentOption}{article}}
89 \DeclareOption{boldkeywords}{\@boldkeywordstrue}
```

Bold, upper-case keywords used to be the default. Now they must be turned on explicitly with the `boldkeywords` option.

```
90 \DeclareOption{boldkeywords}{\@boldkeywordstrue}
```

Pass any other option along to the article class.

```
91 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
```

Default options are to be two-sided and based on the standard \LaTeX article class, unless we are processing the entire book, in which case we base ourselves on the standard book class. Default is to use manuscript option unless otherwise specified.

```
92 \ExecuteOptions{twoside,manuscript} \ProcessOptions\relax
93 \if@book
94 \if@rmtwocol\LoadClass[twocolumn]{book}\else\LoadClass{book}\fi
95 \newcommand{\abstract}{\relax}
96 \newcommand{\@maketitle}{\relax}
97 \else
98 \if@rmtwocol\LoadClass[twocolumn]{article}\else\LoadClass{article}\fi
99 \fi
```

Attempt to use `natbib` for citations 02 Jan 2003.

```
100 \if@natbib
101 \RequirePackage{natbib}[1999/02/25]
102 \bibpunct{( )}{:}{a}{}{,}
103 \newcommand{\bibfont}{\small}
104 \renewcommand{\bibsection}{\section*{REFERENCES}}
105 \setlength{\bibsep}{0pt}
106 \setlength{\bibhang}{1.5em}
107 \bibliographystyle{rmaa}
108 \fi
```

We want the `graphicx` package for the extended syntax of `\includegraphics`. We want the `ifthen` package for using in these macros (although we don't much yet). We explicitly load `babel` since some \LaTeX distributions messed up the hyphenation if we didn't.

```
109 \RequirePackage{graphicx}
110 \RequirePackage{ifthen}
111 \IfFileExists{babel.sty}{%
112 % \let\@restoreindent=\@afterindentfalse
113 \RequirePackage[english]{babel}
114 % \@restoreindent
115 %% reinstate the definition of \@roman so as not to break .idx files
116 \@ifundefined{org@@roman}{\relax}{\renewcommand{\@roman}[1]{\org@@roman{##1}}}
117 }{%
118 \typeout{Package babel.sty not found - don't worry about this}}
```

Try to load the `dcolumn` and `booktabs` packages if they can be found. These can produce nicer-looking tables.

```
119 \IfFileExists{dcolumn.sty}{%
120 \RequirePackage{dcolumn}
121 }{%
122 \typeout{Package dcolumn.sty not found - you will not be able to
123 align columns on decimal points in tables}}
124 \IfFileExists{booktabs.sty}{%
```

```

125 \RequirePackage{booktabs}
126 }{%
127 \typeout{Package booktabs.sty not found - your tables will not look
128   as pretty as they ought too.}
129 }
130 \IfFileExists{makeidx.sty}{%
131   \RequirePackage{makeidx}
132 }{%
133   \typeout{Package makeidx.sty not found - Author Index may not work.}
134 }
135 %% commented out for moment since requires more modern version of LaTeX
136 %%\RequirePackage[latin1]{inputenc}
137 \IfFileExists{url.sty}{%
138   \RequirePackage{url}
139   \newcommand\email{\begingroup \urlstyle{rm}\Url}
140 }{%
141   \typeout{Package url.sty not found - line breaks in email addresses
142     will not work properly.}
143   \newcommand\email[1]{#1}
144 }

```

2.2 Other setup stuff

Some declarations:

```

145 \newif\if@needaddresses
146 \@needaddressestrue
147 \newif\if@frontmatter
148 \@frontmatterfalse
149 \newif\if@inpreamble
150 \@inpreambletrue
151 \newif\if@firstauthor
152 \@firstauthortrue
153 \newif\if@firstaffil
154 \@firstaffiltrue
155 \newif\if@firstaltaffil
156 \@firstaltaffiltrue
157 \newif\if@firstkwd
158 \@firstkwdtrue
159 \newif\if@noexpandADS
160 \@noexpandADSfalse
161 \newif\if@sessiontitlepages
162 \@sessiontitlepagesfalse

```

\@rmaaEmpty These are used in various commands to check if arg was left blank

```

\@rmaaArg 163 \newcommand{\@rmaaEmpty}{}
          164 \newcommand{\@rmaaArg}{}

```

2.3 Compatibility with old L^AT_EX versions

This package is based on the 1998/12/01 release of L^AT_EX. Older releases may not define all the commands that we need. Luckily, we can use `\providecommand` to define these if necessary. The following commands are not defined in the 1994/06/01 release.

<pre> \MakeUpperCase \textsuperscript \textbackslash </pre>	<p>User commands:</p> <pre> 165 \providecommand{\MakeUpperCase}[1]{\uppercase{#1}} 166 \providecommand{\textsuperscript}[1]{\ensuremath{#1}} 167 \providecommand{\textbackslash}{\ensuremath{\backslash}} </pre>
---	--

```

\protected@xdef \LATEX internal commands:
\restore@protect 168 \providecommand{\protected@xdef}{%
\@unexpandable@protect 169 \let\@@protect\protect
\hb@xt@ 170 \let\protect\@unexpandable@protect
171 \afterassignment\restore@protect
172 \xdef}
173 \providecommand{\restore@protect}{\let\protect\@@protect}
174 \providecommand{\@unexpandable@protect}{\noexpand\protect\noexpand}
175 \providecommand{\hb@xt@}{\hbox to}

```

2.4 Page layout

The dimensions of the text were defined by Elizabeth. Text width is 169 mm with equal margins on the two sides:

```

176 \setlength{\textwidth}{169mm}
177 \setlength{\tempdima}{\paperwidth}
178 \addtolength{\tempdima}{-\textwidth}
179 \setlength{\oddsidemargin}{0.5\tempdima}
180 \addtolength{\oddsidemargin}{-1in}
181 \setlength{\evensidemargin}{\oddsidemargin}

```

Text height is 225 mm, top margin is 14 mm.

```

182 \setlength{\textheight}{225mm}
183 \setlength{\topmargin}{-1in}
184 \addtolength{\topmargin}{14mm}

```

Space between columns in two-column styles, header, footer, paragraph indentation:

```

185 \setlength{\columnsep}{9.5mm}
186 \setlength{\headsep}{0.7cm}
187 \setlength{\footskip}{0.75cm}
188 \setlength{\parindent}{1.5em}

```

\set@scalable@length Try out a new scheme for dealing with various spacing dimensions and allowing the user to easily modify them. The command

```
\set@scalable@length{<name>}{<defaultlength>}{<stretch>}{<shrink>}
```

does a `\setlength{<name>}{<defaultlength plus stretch minus shrink>}` and also defines the user command `\<name>Scale{<factor>}` that can be used to rescale length by `<factor>`. Additionally, now defines the package command `\<name>@set@scale{<FACTOR>}` that also rescales the length by `<FACTOR>`, so that the length becomes $\langle factor \rangle \times \langle FACTOR \rangle \times \langle defaultlength \rangle$.

```

189 \newcommand\@set@scalable@length[4]{%
190 %% arg #1: NAME of length without leading ``'
191 %%
192 %% arg #2: default VALUE
193 \expandafter\newlength\csname @#1@default\endcsname
194 \expandafter\setlength\csname @#1@default\endcsname{#2}%
195 \expandafter\newlength\csname @@#1@@default\endcsname
196 \expandafter\setlength\csname @@#1@@default\endcsname{#2}%
197 %% arg #3: default STRETCH
198 \expandafter\newlength\csname @#1@stretch\endcsname
199 \expandafter\setlength\csname @#1@stretch\endcsname{#3}%
200 \expandafter\newlength\csname @@#1@@stretch\endcsname
201 \expandafter\setlength\csname @@#1@@stretch\endcsname{#3}%
202 %% arg #4: default SHRINK
203 \expandafter\newlength\csname @#1@shrink\endcsname
204 \expandafter\setlength\csname @#1@shrink\endcsname{#4}%

```

```

205 \expandafter\newlength\csname @@#1@shrink\endcsname
206 \expandafter\setlength\csname @@#1@shrink\endcsname{#4}%
207 %%
208 %% User-defined scale \@NAME@scale is unity by default
209 \expandafter\gdef\csname @#1@scale\endcsname{1}%
210 %% Package-defined scale \@NAME@SCALE is unity by default
211 \expandafter\gdef\csname @#1@SCALE\endcsname{1}%
212 %%
213 %% internal command \@reset@NAME should expand to
214 %% \setlength{@@NAME@@default}{\@NAME@SCALE\@NAME@default}
215 %% \setlength\NAME{\@NAME@scale@@NAME@@default}
216 %% in other words: scale x SCALE x default
217 \expandafter\gdef\csname @reset@#1\endcsname{%
218 \expandafter\setlength\csname @@#1@@default\endcsname{%
219 \csname @#1@SCALE\endcsname \csname @#1@default\endcsname
220 }
221 \expandafter\setlength\csname @@#1@@stretch\endcsname{%
222 \csname @#1@SCALE\endcsname \csname @#1@stretch\endcsname
223 }
224 \expandafter\setlength\csname @@#1@@shrink\endcsname{%
225 \csname @#1@SCALE\endcsname \csname @#1@shrink\endcsname
226 }
227 \expandafter\setlength\csname #1\endcsname{%
228 \csname @#1@scale\endcsname \csname @@#1@@default\endcsname
229 \@plus
230 \csname @#1@scale\endcsname \csname @@#1@@stretch\endcsname
231 \@minus
232 \csname @#1@scale\endcsname \csname @@#1@@shrink\endcsname
233 }}
234 %%
235 %% User command \NAME@Scale should expand to
236 %% {\renewcommand\@NAME@scale{#1}\@reset@NAME}
237 \expandafter\gdef\csname #1@Scale\endcsname##1{%
238 \expandafter\gdef\csname @#1@scale\endcsname{##1}%
239 \csname @reset@#1\endcsname}
240 %%
241 %% Package command \NAME@set@SCALE should expand to
242 %% {\renewcommand\@NAME@SCALE{#1}\@reset@NAME}
243 \expandafter\gdef\csname #1@set@SCALE\endcsname##1{%
244 \expandafter\gdef\csname @#1@SCALE\endcsname{##1}%
245 \csname @reset@#1\endcsname}
246 %%
247 %% initialize at default values with \@reset@NAME
248 \csname @reset@#1\endcsname
249 }

```

\parskip First use of this new infrastructure: set interparagraph space to be zero but with a small amount of stretchiness.

```

250 % \ifthenelse{\boolean{@manuscript}}{%
251 % \set@scalable@length{parskip}{0.5\baselineskip}{0.3\p@}{0.1\p@}
252 % }{
253 % \set@scalable@length{parskip}{0\p@}{0.3\p@}{0\p@}
254 % }

```

\abovesectionskip Define some utility rubber lengths for use in section 2.13.

```

\belowsectionskip 255 \newlength{\abovesectionskip}
\aboveparaskip 256 \newlength{\belowsectionskip}
\belowparaskip 257 \newlength{\aboveparaskip}
258 \newlength{\belowparaskip}

```

The default values for these lengths are those traditionally used for the onecolumn style.

```

259 \@set@scalable@length{aboveset@length}{3.5ex}{4ex}{2ex}
260 \@set@scalable@length{belowset@length}{2.3ex}{0ex}{2ex}
261 \@set@scalable@length{aboveparaskip}{3.25ex}{2ex}{0.5ex}
262 \@set@scalable@length{belowparaskip}{-1em}{\z@}{\z@}

```

We also make scalable some of the standard float parameters. These are the same defaults as in the standard article classes, but slightly more stretchy. For the twocolumn style, they are currently halved, see below. Note that I have also lumped `\abovecaptionskip` in with these, since it plays a similar role. There is also a `\belowcaptionskip` but it is set to zero in the standard classes.

```

263 \@set@scalable@length{floatsep}{12\p@}{4\p@}{4\p@}
264 \@set@scalable@length{textfloatsep}{20\p@}{4\p@}{8\p@}
265 \@set@scalable@length{intextsep}{12\p@}{4\p@}{4\p@}
266 \@set@scalable@length{dblfloatsep}{12\p@}{4\p@}{4\p@}
267 \@set@scalable@length{dbltextfloatsep}{20\p@}{4\p@}{8\p@}
268 \@set@scalable@length{abovecaptionskip}{10\p@}{\z@}{\z@}

```

Spacing parameters used in `\@maketitle`. These are not changed by default except by the user, so they don't need to go into `\@package@default@lengths`.

```

\@before@title@skip
\@before@author@skip
\@between@author@skip
\@before@abstract@skip
\@after@abstracthead@skip
\@between@abstract@skip
\@before@kwd@skip
\@before@dates@skip
269 \newlength{\@before@title@skip}
270 \newlength{\@before@author@skip}
271 \newlength{\@between@author@skip}
272 \newlength{\@before@abstract@skip}
273 \newlength{\@after@abstracthead@skip}
274 \newlength{\@between@abstract@skip}
275 \newlength{\@before@kwd@skip}
276 \newlength{\@before@dates@skip}
277 \@set@scalable@length{@before@title@skip}{2em}{\z@}{\z@}
278 \@set@scalable@length{@before@author@skip}{1.5em}{\z@}{\z@}
279 \@set@scalable@length{@between@author@skip}{0.5em}{\z@}{\z@}
280 \@set@scalable@length{@before@abstract@skip}{3ex}{1ex}{0.5ex}
281 \@set@scalable@length{@after@abstracthead@skip}{1ex}{\z@}{\z@}
282 \@set@scalable@length{@between@abstract@skip}{2ex}{1ex}{0.5ex}
283 \@set@scalable@length{@before@kwd@skip}{1ex}{0.5ex}{0.2ex}
284 \@set@scalable@length{@before@dates@skip}{2ex}{0.5ex}{0.2ex}

```

Spacing above and below displayed equations also wants to be done like this, but it is more complicated since the standard article classes make these change with the fontsize. Something to do later, maybe.

`\@package@default@lengths` The value actually used for these lengths is controlled by the $\langle SCALE \rangle$ parameter, which depends on the style option that is in effect. This is set using the `\@package@default@lengths` command, which must be called every time the style changes (e.g., changing from onecolumn to twocolumn).

```

285 \newcommand{\@package@default@lengths}{%
286   \ifthenelse{\boolean{@rmtwocol}}{%
287     %% twocolumn mode
288     \aboveset@length@set@SCALE{0.5}
289     \belowset@length@set@SCALE{0.5}
290     \aboveparaskip@set@SCALE{0.5}
291     \belowparaskip@set@SCALE{1}
292     \floatsep@set@SCALE{0.5}
293     \textfloatsep@set@SCALE{0.5}
294     \intextsep@set@SCALE{0.5}
295     \dblfloatsep@set@SCALE{0.5}
296     \dbltextfloatsep@set@SCALE{0.5}
297   }{%
298     %% onecolumn mode

```



```

299 \abovesectionskip@set@SCALE{1}
300 \belowsectionskip@set@SCALE{1}
301 \aboveparaskip@set@SCALE{1}
302 \belowparaskip@set@SCALE{1}
303 \floatsep@set@SCALE{1}
304 \textfloatsep@set@SCALE{1}
305 \intextsep@set@SCALE{1}
306 \dblfloatsep@set@SCALE{1}
307 \dbltextfloatsep@set@SCALE{1}
308 }%
309 }
310 \@package@default@lengths

```

`\RescaleLengths` User commands that will fiddle with all the scalable lengths.

```

\RescaleSecLengths 311 \newcommand{\RescaleLengths}[1]{%
\RescaleFloatLengths 312 \RescaleSecLengths{#1}\RescaleFloatLengths{#1}\RescaleTitleLengths{#1}}
\RescaleTitleLengths 313 \newcommand{\RescaleSecLengths}[1]{%
314 %% sections
315 \abovesectionskipScale{#1}
316 \belowsectionskipScale{#1}
317 \aboveparaskipScale{#1}
318 }
319 \newcommand{\RescaleFloatLengths}[1]{%
320 %% floats
321 \floatsepScale{#1}
322 \textfloatsepScale{#1}
323 \intextsepScale{#1}
324 \dblfloatsepScale{#1}
325 \dbltextfloatsepScale{#1}
326 \abovecaptionskipScale{#1}
327 }
328 \newcommand{\RescaleTitleLengths}[1]{%
329 %% maketitle
330 \@before@title@skipScale{#1}
331 \@before@author@skipScale{#1}
332 \@between@author@skipScale{#1}
333 \@before@abstract@skipScale{#1}
334 \@after@abstracthead@skipScale{#1}
335 \@between@abstract@skipScale{#1}
336 \@before@kwd@skipScale{#1}
337 \@before@dates@skipScale{#1}
338 }

```

`\MSextramargin` For the manuscript option we have an extra 0.3 inch vertical margin and 1 inch horizontal margin for marginal notes (by hand or with `\marginpar`).

```

339 \newlength{\MSextraHmargin}\newlength{\MSextraVmargin}
340 \setlength{\MSextraHmargin}{1in}
341 \setlength{\MSextraVmargin}{0.3in}
342 \if@manuscript
343 \renewcommand{\baselinestretch}{1.1}
344 \addtolength{\textwidth}{-2\MSextraHmargin}
345 \addtolength{\oddsidemargin}{\MSextraHmargin}
346 \setlength{\evensidemargin}{\oddsidemargin}
347 \addtolength{\textheight}{-2\MSextraVmargin}
348 \addtolength{\topmargin}{\MSextraVmargin}
349 % \raggedright
350 \fi

```

Float parameters: don't allow bottom floats by default.

```

351 \renewcommand{\fps@figure}{tp}
352 \renewcommand{\fps@table}{tp}

```

`\rmaa@AuthorWidthFrac` These parameters control what fraction of the total text width can be used by the
`\rmaa@AbstractWidthFrac` list of authors and the abstract/resumen, respectively.

```
353 \newcommand{\rmaa@AuthorWidthFrac}{1.0}
354 \newcommand{\rmaa@AbstractWidthFrac}{0.75}
```

Use a wide abstract to save space in the new style.

```
355 \if@newstyle\renewcommand{\rmaa@AbstractWidthFrac}{1.0}\fi
```

Some things to consider in future versions. Trying to avoid too many widows, etc. Apparently, the following will work best with `\flushbottom`.

```
356 %%\widowpenalty=10000
357 %%\clubpenalty=10000
```

Also, should perhaps try getting rid of underfull/overfull box warnings.

```
358 \hbadness=10000
359 \vbadness=10000
360 \setlength\hfuzz{\maxdimen}
361 \setlength\vfuzz{\maxdimen}
```

2.5 Various text styles for different contexts

`\rmaa@AffilStyle` Style commands for the different fields used by `\maketitle` in constructing the
`\rmaa@PagesStyle` title page of the article. These have the form `\rmaa@XYZStyle{TEXT}`. I'm not
`\rmaa@YearStyle` sure these were really a good idea, but never mind ...

```
\rmaa@VolumeStyle 362 \newcommand{\rmaa@AffilStyle}[1]{\normalsize\rmfamily#1}}
\rmaa@VolumenStyle 363 \newcommand{\rmaa@PagesStyle}[1]{\normalsize\rmfamily#1}}
\rmaa@JournalNameStyle 364 \newcommand{\rmaa@YearStyle}[1]{\normalsize\rmfamily#1}}
\rmaa@ReceivedStyle 365 \newcommand{\rmaa@VolumeStyle}[1]{\normalsize\rmfamily\bfseries#1}}
\rmaa@AbstractHeaderStyle 366 \newcommand{\rmaa@VolumenStyle}[1]{\Large\sffamily\bfseries#1}}
\rmaa@JournalNameStyle 367 \newcommand{\rmaa@JournalNameStyle}[1]{\normalsize\itshape#1}}
368 \newcommand{\rmaa@ReceivedStyle}[1]{\normalsize\rmfamily\itshape#1}}
369 \newcommand{\rmaa@AbstractHeaderStyle}[1]{%
370   {\normalsize\rmfamily\MakeUpperCase{#1}}}
371 \newcommand{\rmaa@TitleStyle}[1]{%
372   {\large\bfseries\rmfamily\boldmath\MakeUpperCase{#1}\par}}
```

`\rmaa@FrontSecStyle` Headings of “front sections” (see section 2.21)

```
373 \newcommand{\rmaa@FrontSecStyle}[1]{%
374   {\normalsize\bfseries\rmfamily\MakeUpperCase{#1}}}
```

`\rmaa@TOCTitleStyle` Commands to set style of TOC and index entries. Rewritten to avoid unnecessary
`\rmaa@TOCPartStyle` font commands in the .toc and .ind files

```
\rmaa@IndexTitleStyle 375 \newcommand{\rmaa@TOCTitleStyle}[1]{\MakeUpperCase{#1}}
\rmaa@TOCAuthorStyle 376 \newcommand{\rmaa@TOCPartStyle}[1]{\rmaa@TOCTitleStyle{#1}}
\rmaa@IndexAuthorStyle 377 \newcommand{\rmaa@IndexTitleStyle}[1]{#1}
378 \newcommand{\rmaa@TOCAuthorStyle}[1]{%
379   {\itshape#1}}
380 \newcommand{\rmaa@IndexAuthorStyle}[1]{%
381   \protect\mbox{\bfseries#1}}
```

`\rmaa@KeywordStyle` The style of the keywords depends on whether we are using the newstyle op-
`\rmaa@KeywordHeaderStyle` tion or not. If we are, then they are small.

```
382 \ifthenelse{\boolean{@newstyle}}{
383   \newcommand{\rmaa@KeywordStyle}[1]{%
384     {\small%
385       \if@boldkeywords
386         \bfseries\MakeUpperCase{\raggedright #1}
387       \else
```

```

388     \raggedright #1
389     \fi
390   }}
391   \newcommand{\rmaa@KeywordHeaderStyle}[1]{%
392     {\small\itshape#1}}
393 {
394   \newcommand{\rmaa@KeywordStyle}[1]{%
395     {\normalsize%
396       \if@boldkeywords\bfseries\fi\raggedright #1}}
397   \newcommand{\rmaa@KeywordHeaderStyle}[1]{%
398     {\normalsize\itshape#1}}

```

2.6 Page styles

`\ps@rmaa` The running headers for normal pages:

```

399 \newcommand{\ps@rmaa}{%
nothing in either foot;
400   \renewcommand\@oddfoot{\relax}%
401   \renewcommand\@evenfoot{\relax}%
page number and short author list in the even heads;
402   \renewcommand\@evenhead{\rlap{\thepage}\hfil\@shortauthor\hfil}%
short title and page number in the odd heads.
403   \renewcommand\@oddhead{\hfil\@shorttitle\hfil\llap{\thepage}}
404 }

```

`\ps@rmaafirstpage` The header of the first page of each article:

```

405 \newcommand{\ps@rmaafirstpage}{%
406   \renewcommand\@oddfoot{\hfil\thepage}%
footer corrected (06 Jun 2000) to have page on outside edge;
407   \renewcommand\@evenfoot{\thepage\hfil}%
header has journal name, volume, and page numbers for a regular article, or
similar for special cases.
408   \renewcommand\@oddhead{%
409     \if@preprint
410       \if@proceedings
411         \textsc{To appear in ``\@conftitle{}
412         (\rmaa@YearStyle{\@year})''}\hfil \textit{RevMexAA(SC)}
413       \else
414         \textsc{To appear in} \@journalname\hfil
415       \fi
416     \else
417       \if@guide
418         \textsc{Documentation}
419       \else
420         \if@manuscript
421           Manuscript for \@journalname{}
422         \else
423           \@journalname, \rmaa@VolumeStyle{\@volume},
424           \rmaa@PagesStyle{\@artpages}\
425         \fi
426       \fi
427       (\rmaa@YearStyle{\@year})\hfil
428     \fi}%
429   \renewcommand\@evenhead{\@oddhead}}
By default, use the \ps@rmaa page style.
430 \pagestyle{rmaa}

```

2.7 Preamble commands

Everything you need for setting the title page, TOC and index entries, etc.

2.7.1 Commands for the title page

<code>\resumen</code>	User commands for setting the resumen and abstract. These should be used in
<code>\@resumen</code>	the document header. The internal commands <code>\@resumen</code> and <code>\@abstract</code> are
<code>\abstract</code>	used to hold the actual text pending output via the <code>\maketitle</code> command.
<code>\@abstract</code>	<pre> 431 \newif\if@setresumen 432 \newcommand{\resumen}[1]{% 433 % \renewcommand{\@resumen}{\selectlanguage{spanish}#1}% 434 \renewcommand{\@resumen}{\ignorespaces#1}% 435 \@setresumentrue} 436 \renewcommand{\abstract}[1]{% 437 \renewcommand{\@abstract}{\ignorespaces#1}% 438 \renewcommand\ADS@abstract{#1} 439 % Not a good idea, since then author macros are not expanded and 440 % cause errors later. However, by not doing it we are vulnerable to 441 % fragile commands.... 442 \if@noexpandADS\@onelevel@sanitize{\ADS@abstract}\fi 443 \@abstractpresenttrue 444 } 445 \newcommand{\ADSnoexpand}{\@noexpandADStrue} </pre>
<code>\boldabstract</code>	<p>This is the version for doing 1-page conference proceedings. Still save the text for ADS but then write it out immediately as a bold paragraph.</p> <pre> 446 \newcommand{\boldabstract}[1]{% 447 \gdef\ADS@abstract{#1}% 448 \renewcommand{\@abstract}{#1}% 449 \if@noexpandADS\@onelevel@sanitize{\ADS@abstract}\fi% 450 \noindent\textbf{\boldmath #1} 451 } </pre> <p>Default value in each case is to print out a warning if not set</p> <pre> 452 \newcommand{\@resumen}{% 453 \@setresumenfalse \ClassWarningNoLine{rmaa}{No Spanish abstract 454 (resumen) specified - if you do not speak Spanish, this will be 455 translated by the editors}% 456 \textbf{Favor de proporcionar un resumen en espa~nol. If you are 457 unable to translate your abstract into Spanish, the editors will 458 do it for you.} } 459 \newcommand{\@abstract}{\ClassWarningNoLine{rmaa}{No abstract 460 specified}} </pre>
<code>\title</code>	Similarly, <code>\title</code> is the preamble command to set the title of the article. This
<code>\@rawtitle</code>	is used in various places, typeset in different styles, hence the use of the internal
<code>\@TOCtitle</code>	<code>\@rawtitle</code> , <code>\@title</code> , <code>\rmaaIndexTitle</code> , and <code>\@TOCtitle</code> commands,
<code>\rmaaIndexTitle</code>	each of which uses the relevant style from section 2.5
	<pre> 461 \newcommand{\@rawtitle}{Raw Title} 462 \newcommand{\@TOCtitle}{\rmaa@TOCtitleStyle{Title for TOC}} 463 \newcommand{\rmaaIndexTitle}{\rmaa@IndexTitleStyle{Title for index}.} 464 \newcommand{\@TOCaftertitle}{} 465 \renewcommand{\title}[1]{% 466 % {\ADS@sanitize\xdef\@rawtitle{#1}} 467 \renewcommand\@rawtitle{\noexpand#1} 468 \let\ADS@title=\@rawtitle 469 \renewcommand{\@title}{\rmaa@TitleStyle{#1}}% </pre>

```

470 \renewcommand{\@TOCtitle}{\rmaa@TOCtitleStyle{#1}\@TOCaftertitle}%
471 \renewcommand{\rmaaIndexTitle}{\rmaa@IndexTitleStyle{#1}\@TOCaftertitle}.}%
472 }

```

All the weird and whacky ways of indicating the author affiliations.

`\affil` First, the way that sets it directly underneath the authors name. Note that `\affil` trumps all other affiliations for the purposes of getting into the ADS stuff (we use `\gdef`). ...

```

473 \newcommand{\affil}[1]{%
474   \[1.5ex]\rmaa@AffilStyle{#1}\[1.5ex]%
475   \if@firstaffil\gdef\ADS@affil{#1}\@firstaffilfalse\fi%
476 }
477 \renewcommand{\and}{\and\[1.5ex]}

```

`\altaffil` Alternative affiliations are footnoted.

```

478 \newcommand{\altaffil}[1]{%
479   \if@firstaltaffil\gdef\ADS@affil{#1}\@firstaltaffilfalse\fi%
480   \thanks{#1}}

```

`\altaffilmark` Alternative-alternative mechanism for affiliations—should not be mixed with
`\altaffiltext` `\altaffil` (unless you know what you are doing) or there will be problems with numbering.

```

481 \newcommand{\altaffilmark}[1]{\textsuperscript{#1}}
482 \newcommand{\altaffiltext}[2]{%
483   \if@firstaltaffil\gdef\ADS@affil{#2}\@firstaltaffilfalse\fi
484   \stepcounter{footnote}%
485   \protected@xdef\@thanks{\@thanks
486     \protect\footnotetext[#1]{#2}}}

```

`\keywords` Sundry minor preamble commands. All self-explanatory, I hope. `\keywords` is
`\@keywords` the old user interface (deprecated). New articles should use `\addkeyword` once
`\@keywordheader` for each keyword. That way the ADS record comes out right too (comma rather than em-dash separator).

```

487 \newcommand{\@kwds}{ --- }
488 \newcommand{\ADS@kwds}{ , }
489 \newcounter{kwds}\setcounter{kwds}{0}
490 \newcommand{\addkeyword}[1]{%
491   \addtocounter{kwds}{1}
492   \ifthenelse{\thekwds > 6}{
493     \ClassError{rmaa}{Too many keywords. A maximum of 6 keywords is allowed.}{}
494   }{}
495   \if@firstkwds
496     \renewcommand{\@keywords}{\if@boldkeywords\uppercase{#1}\else #1\fi}
497     {\ADS@sanitize\def\ion{\plainion}\gdef\ADS@keywords{#1}}
498     \@firstkwdsfalse
499   \else%
500     \edef\@keywords{\@keywords\@kwds \if@boldkeywords\uppercase{#1}\else #1\fi}%
501     {\ADS@sanitize\def\ion{\plainion}\xdef\ADS@keywords{\ADS@keywords\ADS@kwds #1}}%
502   \fi}
503 \newcommand{\ADS@sanitize}{%
504   \def\mathrm{}
505   \def\@{\ }
506   \def~{\ }
507   \def\langle{<}
508   \def\rangle{>}
509   \def\log{log }
510   \def\sin{sin }
511   \def\cos{cos }

```

```

512 \def\tan{tan }
513 \def\fd{^d.}
514 \def\fh{^h.}
515 \def\fm{^m.}
516 \def\fs{^s.}
517 \def\fdg{.}
518 \def\farcm{'.}
519 \def\farcs{''.}
520 \def\arcdeg{}
521 \def\,{ { }
522 }
523 \newcommand{\keywords}[1]{%
524 \renewcommand{\ADS@keywords}{#1}
525 \renewcommand{\@keywords}{\uppercase{#1}}
526 }
527 \newcommand{\@keywordheader}{\rmaa@KeywordHeaderStyle{Key Words:}}
528 \newcommand{\@keywords}{%
529 \ClassWarningNoLine{rmaa}{No keywords specified}%
530 Keywords go here
531 }

\shorttitle Commands for setting the running headers.
\shortauthor 532 \newcommand{\shorttitle}[1]{%
\@shorttitle 533 \renewcommand{\shorttitle}{\MakeUpperCase{#1}}}
\shortauthor 534 \newcommand{\shortauthor}[1]{%
535 \renewcommand{\shortauthor}{\MakeUpperCase{#1}}}
536 \newcommand{\@shorttitle}{SHORT TITLE GOES HERE}
537 \newcommand{\@shortauthor}{SHORT AUTHOR GOES HERE}

```

2.7.2 The full addresses

```

\fulladdresses Aaghh, the full addresses! A perennial source of problems.
\@fulladdresses 538 \newlength{\@fulladdheight}
\@fulladdheight 539 \newlength{\@fulladddepth}
\@fulladddepth 540 \newsavebox{\@fulladdbox}
\@fulladdbox 541 %% \fulladdresses command modified (11 May 2000) so that we can put
542 %% \fulladdresses{} in the article to suppress the output of the
543 %% addresses
544 \newcommand{\@FinalFigure}{\relax}
545 \newcommand{\FinalFigure}[1]{\renewcommand{\@FinalFigure}{#1}}
546 \newcommand{\fulladdresses}[1]{%
547 \renewcommand{\@rmaaArg}{#1}
548 \ifx\@rmaaArg\@rmaaEmpty
549 \renewcommand{\@fulladdresses}{}
550 \else
551 \renewcommand{\@fulladdresses}{
552 \normalsize%
553 \ifx\@FinalFigure\relax\else\vfill\@FinalFigure\vfill\fi
554 %% \vspace*{1ex}
555 %% do addresses as a list (copied from thebibliography environment)
556 \list{\null}{\leftmargin 1.5em\topsep\z@\labelwidth\z@\labelsep\z@\itemindent -1.5em
557 \itemsep\z@\parsep\z@\usecounter{enumi}}
558 \sloppy\clubpenalty4000\widowpenalty4000
559 \sfcode'\.=1000\relax
560 #1
561 \endlist
562 }
563 \fi
564 }
565 \newcommand{\@fulladdresses}{Full addresses go here}

```

`\suppressfulladdresses` New user-level command for suppressing full addresses should you so desire. Currently used in the single-page-poster style.

```
566 \newcommand{\suppressfulladdresses}{\@suppressfulladdressestrue\@needaddressesfalse}
```

`\printdates` Command to activate the printing out of the received/accepted dates. This can
`\noprintdates` also be done using the `printdates` option, which is the default for `journal`, but not for `proceedings`.

```
567 \newcommand{\printdates}{\@printdatestrue}
568 \newcommand{\noprintdates}{\@printdatesfalse}
```

`\@outputaddressesifnecessary` Command to output the addresses if we haven't already done so This is called by:

1. The end of the `thebibliography` environment
2. The `\outputfulladdresses` command

```
569 \newcommand{\@outputaddressesifnecessary}{%
570   \ClassInfo{rmaa}{Calling \@outputaddressesifnecessary}
571   \ifthenelse{\boolean{@needaddresses}}{%
572     %% If in one column style, or in the first column of a two column
573     %% style then we can try to put it on this page
574     \ifthenelse{\boolean{@firstcolumn} \or \not\boolean{@rmtwocol}}{%
575       \@outputaddresses}{%
576         %% otherwise give warning it will be on a separate page
577         \ClassWarning{rmaa}{Full addresses will go on a separate
578           page (please see User Guide for how to remedy this)}%
579       %% If we haven't managed yet, put it on its own page
580       \ifthenelse{\boolean{@needaddresses}}{%
581         \if@debug{\ClassWarning{rmaa}{In this silly bit!}}\fi
582         \clearpage\vfill\@outputaddresses}{}%
583       }{
584         %% If we don't need them, we still might need to do the eoa hook
585         \ifthenelse{\boolean{@suppressfulladdresses}}{%
586           \if@debug{\ClassWarning{rmaa}{XXX}}\fi
587         %% \if@book\else\@endofarticlehook\@null\fi
588         }{}
589       }%
590   }
```

`\outputfulladdresses` A user interface to the above command, in case there is no `biblio` (11 May 2000)

```
591 \newcommand{\outputfulladdresses}{\@outputaddressesifnecessary}
```

`\adjustfinalcols` This command starts a new column and should be used to ensure that the columns balance on the last page. It also outputs the full author addresses to ensure that this occurs in the left hand column. The `\par` command is so that the current line will be taken account of when working out `\pagetotal`

```
592 \newcommand{\adjustfinalcols}{\if@twocolumn\goodbreak\@outputaddresses\newpage\noindent\fi}
```

`\@outputaddresses` Command to do the work of outputting the addresses. This can be called by

1. an explicit `\adjustfinalcols`
2. via `\@outputaddressesifnecessary`, q.v.

```
593 \newcommand{\@outputaddresses}{%
594   % Allow option of suppressing the full addresses, in which case
595   % we just run the hook if we are not in a book style
596   \if@suppressfulladdresses
```

```

597 %%      \if@book\else\endofarticlehook\null\fi
598 \else
599 %% save the full addresses in a box for output later
600 \sbox{\@fulladdbox}{\parbox{\textwidth}{\@fulladdresses}}
601 % calculate height of address box
602 \settoheight{\@fulladdheight}{\usebox{\@fulladdbox}}
603 \settodepth{\@fulladddepth}{\usebox{\@fulladdbox}}
604 \addtolength{\@fulladdheight}{\@fulladddepth}
605 \if@debug
606 { \typeout{Address total height: \the\@fulladdheight}
607   \typeout{Text height: \the\pagetotal}
608   \typeout{Goal height: \the\pagegoal}
609 }
610 \fi
611 % reuse \@fulladdheight to mean the total height of text+addresses
612 \addtolength{\@fulladdheight}{\pagetotal}
613 %% \addtolength{\@fulladdheight}{-\baselineskip}
614 \if@debug\typeout{Adjusted text + addresses height: \the\@fulladdheight}\fi
615 % check it will fit on current page
616 \ifdim\@fulladdheight<\pagegoal
617   %% must shift it to the left
618   %% to compensate for the hanging indentation in the reference list.
619   %% NOTE: this is not foolproof!
620   %% NB. This will give overfull hbox warnings, which is a bit ugly.
621   \vfill\noindent\if@biblist\hspace*{-\leftmargin}\fi
622   \usebox{\@fulladdbox}
623   % Set this to show we've done it
624   \@needaddressesfalse
625   % and assume we are at the end of the article
626   % so that we do the EOA hook if not in the book style
627 %%      \if@book\else\endofarticlehook\fi
628 \else
629   % if not, just do nothing. With luck, this function will get
630   % called again on the next page
631   \if@debug{\typeout{Holding over full addresses to next page}}\fi
632 \fi\fi
633 }

```

2.7.3 Commands for editors

Some user/editor commands for doing the TOC and index in the book option. They are defined here rather in the book-specific part since they need to be always available in order to avoid breaking documents.

<pre> \listofauthors \@rawauthors \rmaaTOCauthors </pre>	<p>The command <code>\listofauthors</code> formats an author list for use in the TOC. It should contain the same names as in the <code>\author</code> command, but without the affiliation garbage and using <code>\&</code> instead of and.</p> <pre> 634 \newcommand{\@rawauthors}{Raw Authors} 635 \newcommand{\rmaaTOCauthors}{\noexpand\rmaaTOCAuthorStyle{Author list for TOC}} 636 \newcommand{\listofauthors}[1]{% 637 \renewcommand{\@rawauthors}{#1} 638 \renewcommand\rmaaTOCauthors{\noexpand\rmaaTOCAuthorStyle{#1}}} </pre>
<pre> \indexauthor </pre>	<p>The command <code>\indexauthor</code> produces an index entry for each author. This command must come <i>after</i> the <code>\title</code> and the <code>\listofauthors</code> commands. Also, there should be one <code>\indexauthor</code> command for <i>each</i> author. We also add the author onto the end of the <code>\ADS@authors</code> macro and construct the <code>\ADS@authorinitial</code> by a most cunning method (see below), but only for the first author.</p>

No, No, NO! This was all wrong. Backed out completely:

Completely rewritten (19 Dec 2002) since we now use the index class, so as to be able to alphabetize accented characters. A side effect of this is that `\index` no longer expands out the argument after the @, so we instead add all the `\index` commands to a list (`\indexauthor@deferlist`), which is executed in the `@begofarticlehook`.

Note the stuff with `\toks0` is copied from Exercise 20.15 of the `TEXbook`—it is to make sure the latin1-accented name gets passed into the `idx` file.

We now go back to the old way of doing things, using an optional argument to the `\indexauthor` command that has the name without accents.

```

639 \newcommand\@isortkey{}
640 \newcommand\@emptykey{empty}
641 \newcommand\indexauthor[2][empty]{
642   \renewcommand\@isortkey{#1}
643   \ifx\@isortkey\@emptykey \renewcommand\@isortkey{#2}\fi
644   \index{\@isortkey @{\rmaaIndexAuthorStyle{#2}}\hskip1em plus1em minus0.4em
645     \rmaaIndexTitle\hskip1em plus2em minus0.4em\penalty-100
646     \rmaaTOCauthors}}
647   \indexauthorADS{#2}
648 }
649 %%\def\indexauthor@deferlist{\relax}
650 %%\long\def\indexauthor#1{
651 %%  \def\@name{#1} \toks0=\expandafter{\@name}
652 %%  \toks1=\expandafter{\indexauthor@deferlist}
653 %%  \protected@xdef\indexauthor@deferlist{%
654 %%    \the\toks1
655 %%    \noexpand\index{\the\toks0@{\noexpand\rmaaIndexAuthorStyle{\the\toks0}\noexpand\hskip1
656 %%      \rmaaIndexTitle\noexpand\hskip1em plus2em minus0.4em\noexpand\penalty-100
657 %%      \rmaaTOCauthors}}
658 %%  }
659 %%  \indexauthorADS{#1}
660 %% }
661 %%\xdef\indexauthor@deferlist{}
662 \newcommand\indexauthorADS[1]{%
663   \if@firstauthor\protected@xdef\ADS@authorinitial{\firstletter{#1}}\fi
664   \protected@xdef\ADS@authors{\ADS@authors\if@firstauthor\else ; \fi
665     #1}
666   \@firstauthorfalse
667 }

```

Note that the first `#1` sets the key for the index, making sure it actually starts with first letter of the surname. Meanwhile, the `@{ . . . }` expression, which starts with some control sequences is what is written to the `.ind` file. See the `makeindex` man page for details.

These are utility functions used in the above. `\lett` is a counter indicating the current letter in the string. `\firstletter` just prints the first letter of its argument.

```

668 \newcommand{\KillAllAccents}{\def\'{}\def\'{}\def~{}\def\.\{}\def\i{i}}
669 \newcommand\firstletter[1]{\@car #1\@nil}

```

\SetVolume	These are for the editors to set the volume number, etc.
\SetMSnumber	670 \newcommand{\SetVolume}[1]{%
\SetFirstPage	671 \renewcommand{\@volume}{#1}
\SetYear	672 \edef\ADS@volume{\PadToFourWithDots{#1}}
\ReceivedDate	
\AcceptedDate	17

```

673 \renewcommand{\@volumen}{\rmaa@VolumenStyle{volumen #1}}%
674 }
675 \newcommand{\SetMSnumber}[1]{\renewcommand{\@MSnum}{#1}}

```

Note that there is no real reason to use `\SetFirstPage` since all the page numbering is done automatically in the book style.

```

676 \newcommand{\SetFirstPage}[1]{\setcounter{page}{#1}}
677 \newcommand{\SetYear}[1]{%
678 \renewcommand{\@year}{#1}
679 \renewcommand{\ADS@year}{#1}
680 \renewcommand{\@anyo}{\rmaa@VolumenStyle{#1}}
681 }
682 \newcommand{\ReceivedDate}[1]{\renewcommand{\@received}{#1}}
683 \newcommand{\AcceptedDate}[1]{\renewcommand{\@accepted}{#1}}

```

<pre> \@volume \@volumen \@artpages \@year \@anyo \@received \@accepted \@MSnum </pre>	<p>Default values for the containers used by above commands, plus a few more useful ones.</p> <pre> 684 \newcommand{\@volume}{00} 685 \newcommand{\@volumen}{\rmaa@VolumenStyle{00}} 686 \newcommand{\@artpages}{% 687 \pageref{RMAAFirstPage}--\pageref{RMAALastPage}} 688 \newcommand{\@year}{2007} 689 \newcommand{\@anyo}{\rmaa@VolumenStyle{2007}} 690 \newcommand{\@journalname}{\rmaa@JournalNameStyle{% 691 \if@proceedings\RMAASClong\else\RMAAlong\fi}} 692 \newcommand{\@received}{} 693 \newcommand{\@accepted}{} 694 \newcommand{\@MSnum}{0000} </pre>
--	---

The following commands are most useful in the book style. However, the `\SetConfTitle` command can now be used in individual articles to set the header for the preprint style.

```

695 \newcommand{\@reunionplace}{Lugar de la reuni\on}
696 \newcommand{\@reuniondate}{Fecha de la reuni\on}
697 \newcommand{\@conftitle}{Conference Title}
698 \newcommand{\SetReunion}[2]{\renewcommand{\@reunionplace}{#1}\renewcommand{\@reuniondate}{#2}}
699 \newcommand{\SetConfTitle}[1]{\renewcommand{\@conftitle}{#1}}
700 \newcommand{\@editors}{Juan Ram\on de la Fuente and ``El Mosh''}
701 \newcommand{\SetEditors}[1]{\renewcommand{\@editors}{#1}}
702 \newcommand{\@editores}{Juan Ram\on de la Fuente y ``El Mosh''}
703 \newcommand{\SetEditores}[1]{\renewcommand{\@editores}{#1}}
704 \newcommand{\@mes}{mes de la publicaci\on}
705 \newcommand{\SetMes}[1]{\renewcommand{\@mes}{\rmaa@VolumenStyle{#1}}}

```

2.8 Notes for Author Proofs and Communication between Editors

We introduce a command `\Note` that should be used to describe any change made to the manuscript. These are a bit tricky to get right. In general we use `\marginpar` but this only works in outer paragraph mode, so we just bung the box where we are if we are in a figure caption or something. If we are in the preamble, then we just use a s part of the

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command.

```

706 \newif\if@arenotes
707 \@arenotesfalse
708 \newcounter{notecounter}
709 \setcounter{notecounter}{0}
710 \newcommand\NotesList{}
711 \newcommand\Note[1]{%
712   \if@proof{%
713     \@arenotesttrue%
714     \stepcounter{notecounter}%
715     \if@inpreamble\else{%
716       \NoteMark{\arabic{notecounter}}}%
717     }\fi
718     \protected@xdef\NotesList{\NotesList
719       \protect\item #1}%
720   }\fi%
721 }
722 \newcommand\Changed[2]{Changed ``#1'' to ``#2''}
723 \newcommand\NoteMark[1]{%
724   \ifinner
725     \raisebox{1ex}[0pt][0pt]{\makebox[0pt][l]{\framebox{\footnotesize\bfseries
726       N#1}}}%
727   \else
728     \marginpar{\framebox{\footnotesize\bfseries N#1}}%
729   \fi
730 }
731 \newcommand\RefNote[1]{\if@proof\NoteMark{\ref{#1}}\relax\fi}
732 \newcommand\NoteLabel{\protect\label}
733 \newcommand\OutputNotes{%
734   \bgroup
735   \onecolumn
736   \section*{EDITORIAL NOTES}
737   \begin{enumerate}
738     \NotesList
739   \end{enumerate}
740 \egroup
741 }
742 \DeclareRobustCommand\cs[1]{\texttt{\char'\#1}}
743

```

2.9 Bibliographic Records for ADS

<pre> \ADS@BibCode \ADS@year \ADS@journal \ADS@volume \ADS@firstpage \ADS@authorinitial </pre>	<p>We use the <code>\ADS@BibCode</code> command to hold the bibliographic code for ADS. It is used in the %R field of the bibliographic record for each article. The format is</p> <p style="text-align: center;">YYYYJJJJVVVMPPPPA</p> <p>where YYYY is the year, JJJJJ is the journal code, which is RMxAA or RMxAC, VVVV is the volume number (right-justified), M is not used by us, PPPP is the first</p>
--	--

page number (right-justified), and A is the initial of the first author's surname. The volume and page fields are padded with periods ('.'), which causes us some fun (this is done with the macro `\PadToFourWithDots` described below).

All these individual bits are held in the commands `\ADS@year`, `\ADS@journal`, `\ADS@volume`, `\ADS@firstpage`, `\ADS@authorinitial`.

```

744 \newcommand{\SetADSBibCode}[1]{\renewcommand{\ADS@BibCode}{#1}}
745 \newcommand{\ADS@BibCode}
746 {\ADS@year\ADS@journal\ADS@volume.\PadToFourWithDots{\ADS@firstpage}\ADS@authorinitial}
747 \newcommand{\ADS@year}{2001}
748 \newcommand{\ADS@journal}{\if@proceedings RMxAC\else RMxAA\fi}
749 \newcommand{\ADS@volume}{...}

```

These two are just set to default values here, `\ADS@firstpage` is set in the document environment for included articles, in the frontsection environment, `\tableofcontents` command, index and abstracts environments. Also by `\AtBeginDocument` for stand-alone articles.

God knows how we are going to do `\ADS@authorinitial`!

```

750 \newcommand{\ADS@firstpage}{...}
751 \newcommand{\ADS@authorinitial}{A}

```

We also have a whole slew of other fields that can be set. These are all listed in Table 1. Most of them still have to be defined. A lot of these macros are set by

Table 1: ADS Bibliographic Records

Code	Description	Macro Name	Comment
%R	Bibliographic Code	<code>\ADS@BibCode</code>	required
%A	Author list	<code>\ADS@authors</code>	required, generate from <code>\indexauthor</code>
%F	Author affiliation	<code>\ADS@affil</code>	format: AA(...) AB(...) ...
%J	Journal Name	<code>\ADS@journalname</code>	
%D	Publication Date	<code>\ADS@fulldate</code>	
%L	Last Page	<code>\ADS@lastpage</code>	generate from label
%T	Title	<code>\ADS@title</code>	required, generate from <code>\title</code>
%C	Abstract Copy-right	<code>\ADS@copyright</code>	ask UNAM lawyers!
%U	URL for electronic document	<code>\ADS@url</code>	hmmmm
%K	Keywords	<code>\ADS@keywords</code>	set equal to <code>\@keywords</code>
%A	Abstract Text	<code>\ADS@abstract</code>	set equal to <code>\@abstract</code>
%R	References	<code>\ADS@references</code>	somehow generate from the bibliography

other commands, as mentioned in the Table, but some need to be set explicitly here.

`\ADS@journalname` This does not contain any accents at the moment so as not to cause problems—this maybe should be changed though.

```
752 \newcommand{\ADS@journalname}{%
753   \if@proceedings\@conftitle\space (Eds. \@editors) \fi%
754   Revista Mexicana de Astronom\‘\i{ }a y Astrof\‘\i{ }sica%
755   \if@proceedings\space (Serie de Conferencias)\fi%
756   \space Vol. \@volume, pp. \ADS@firstpage--\ADS@lastpage\space (\@year)%
757   \space (http://www.astroscu.unam.mx/\~{ }rmaa/)
758 }
```

`\ADS@keywords` `\ADS@abstract` is straightforward, since we already have the text saved as `\@abstract`. We could do the same with `\ADS@keywords` but to avoid unwanted formatting we explicitly set it in `\keywords` (p. 13). `\ADS@title` is just set to `\@rawtitle`, which we were already using for another purpose.

```
759 \let\ADS@title=\@rawtitle
760 \newcommand{\ADS@keywords}{No keywords specified}
761 \newcommand{\ADS@abstract}{No abstract specified}
```

`\ADS@authors` `\ADS@authors` wants to be in “Other, A. N.” format, but with semi-colons between authors. The most natural way to do this seems to be with `\indexauthor` (p. 16). We append each author to this macro, which means we must explicitly clear it for each new article (done in `\article`). .

```
762 \newcommand{\ADS@authors}{{}}
```

`\ADS@fulldate` Other sundry data, together with user commands for bits that can be set by the Editors. The `\ADS@url` is constructed from the website (currently `http://www.astrosmo.unam.mx/rmaa/`, the journal descriptor (e.g., `RMxAC. .10/`), followed by the path to the PDF file (e.g., `PDF/RMxAC. .10_HEW1.pdf`).

```
\ADS@url 763 \newcommand{\ADS@website}{http://www.astrosmo.unam.mx/rmaa/}
\SetWebsite 764 \newcommand{\ADS@url}
\SetMonthNumeric 765 {\ADS@website\ADS@journal\ADS@volume\ADS@number/PDF/\ADS@journal\ADS@volume\ADS@number\_art
766 \newcommand{\ADS@number}{{}}
767 \newcommand{\ADS@fulldate}{{00/\ADS@year}}
768 \newcommand{\ADS@lastpage}{{00}}
769 \newcommand{\ADS@copyright}{{(C) \ADS@year; Instituto de Astronom\‘\i{ }a,
770 Universidad Nacional Aut\‘onoma de M\‘exico}}
771 \newcommand{\SetNumber}[1]{\renewcommand{\ADS@number}{-#1}}
772 \newcommand{\SetWebsite}[1]{\renewcommand{\ADS@website}{#1}}
773 \newcommand{\SetMonthNumeric}[1]{\renewcommand{\ADS@fulldate}{#1/\ADS@year}}
```

`\ADS@affil` These two are somewhat more problematical. Affiliation currently only works for the first author (see ...) pending redesign of the user interface. References are now done by wrapping the `thebibliography` environment to open another input stream on the same file and search through for the `\bibitems`.

```
774 \newcommand{\ADS@references}{{}}
775 \newcommand{\ADS@affil}{{}}
```

Define two macros that expand to the strings `\begin{thebibliography}` and `\end{thebibliography}`. Note that the idea for this and much else is inspired by the code for the `docstrip` package. Also define `\StartBibX` in case authors use the more standard `\begin{thebibliography}`{} syntax.

```
776 \edef\EndBib{\expandafter\@gobble\string\end\string{thebibliography}\string}}
777 \edef\StartBib{\expandafter\@gobble\string\begin\string{thebibliography}\string}}
778 \edef\StartBibX{\expandafter\@gobble\string\begin\string{thebibliography}\string}\string{\st
```

Define two new logical variables. `\ifAnotherline` is true if we want to read another line from the input stream. It is set to false when we encounter the `\end{thebibliography}`. `\ifInBib` is set to true when we find the `\begin{thebibliography}` and tells us to start saving the following lines.

```
779 \newif\ifAnotherLine
780 \newif\ifInBib
```

`makeOther` We need a macro to change the catcodes of lots of things to other.

```
781 \def\makeOther#1{\catcode`#1=12\relax}
```

`\RereadBiblio` Define a macro to do all the fiddly stuff. This is used at the beginning of the `thebibliography` environment (Sec 2.16).

```
782 \newread\tf@biblio
783 \newcommand{\RereadBiblio}{%
```

Open the current file again for reading

```
784 \begingroup
785 \immediate\openin\tf@biblio=\articlename
```

Everything in a group to be safe. Initialize logicals. Black magic to change catcodes and avoid blank lines being interpreted as `\par`.

```
786 \AnotherLinetrue\InBibfalse
787 \makeOther\ \makeOther\\\makeOther\$%
788 \makeOther#\makeOther^\makeOther^^K%
789 \makeOther_\makeOther^^A\makeOther\%%
790 \makeOther~\makeOther\{\makeOther\}\makeOther\&%
791 \endlinechar-1\relax
```

Start looping through the file. Read each line to the macro `\Line`. If we have got to EOF or end of biblio then set `\AnotherLinefalse`.

```
792 \loop
793 \read\tf@biblio to \Line
794 \ifx\Line\EndBib\AnotherLinefalse\InBibfalse\fi
795 \ifeof\tf@biblio \AnotherLinefalse\fi
```

If we are in the biblio and the line is not blank then append it to the `\ADS@references` macro together with a newline.

```
796 \ifInBib
797 \ifx\Line\empty\else\xdef\ADS@references{\ADS@references\Line^^J}\fi
798 \fi
```

Check if the line we just saw was the start of biblio, then repeat the loop if necessary.

```
799 \ifx\Line\StartBib\InBibtrue\fi
800 \ifx\Line\StartBibX\InBibtrue\fi
801 \ifAnotherLine\repeat
802 \immediate\closein\tf@biblio
803 \endgroup
804 }
```

`\PadToFourWithDots` Utility function for left-padding a number to 4 characters with periods. Used in constructing `\ADS@BibCode`. This is a very simple algorithm and *requires* that the argument actually be a number—if it is not then dire consequences will result.

```
805 \newcommand{\PadToFourWithDots}[1]{%
806 \ifnum #1 > 999 #1%
807 \else\ifnum #1 > 99 .#1%
808 \else\ifnum #1 > 9 ..#1%
809 \else ...#1%
810 \fi\fi\fi}
```

```

811 %% \ifnum \count0 > 999 #1%
812 %% \else\ifnum \count0 > 99 .#1%
813 %% \else\ifnum \count0 > 9 ..#1%
814 %% \else ...#1%
815 %% \fi\fi\fi}

\ADS@dumpdata \ADS@dumpdata is the macro that actually does the job of writing out all the
\ADS@write data to an auxiliary file, using \ADS@write to write each field. The file is set up
\ADS@openfile with \ADS@openfile, which currently is done in the TOC of a book.

816 \newcommand{\ADSfield}[2]{\relax}
817 \newcommand{\ADSvfield}[2]{\relax}
818 %%\renewcommand{\ADSfield}[12]{\%#1 #2}
819 \newcommand{\ADS@dumpdata}
820 {
821 \ADS@write{\string\begin{ADSarticle}}
822 \ADS@WRITE{\string\ADSfield{R}{\ADS@BibCode}}
823 \ADS@write{\string\ADSfield{A}{\ADS@authors}}
824 {\ADS@sanitize\ADS@write{\string\ADSfield{F}{AA(\ADS@affil)}}}
825 \ADS@write{\string\ADSfield{J}{\ADS@journalname}}
826 \ADS@write{\string\ADSfield{D}{\ADS@fulldate}}
827 \ADS@write{\string\ADSfield{L}{\ADS@lastpage}}
828 {\ADS@sanitize\ADS@write{\string\ADSfield{T}{\ADS@title}}}
829 \ADS@write{\string\ADSfield{C}{\ADS@copyright}}
830 \ADS@write{\string\ADSfield{U}{\ADS@url}}
831 \ADS@write{\string\ADSfield{K}{\ADS@keywords}}
832 {\ADS@sanitize\ADS@write{\string\ADSfield{B}{\ADS@abstract}}}
833 \ADS@write{\string\ADSfield{Z}{\ADS@references}}
834 \ADS@write{\string\end{ADSarticle}}
835 }
836 %%\newcommand{\ADS@write}[1]{\if@book\addtocontents{ads}{#1}\fi}
837 %%\newcommand{\ADS@openfile}{\@starttoc{ads}}
838 \newcommand{\ADS@write}[1]{\set@display@protect\immediate\write\tf@ads{#1}}
839 \newcommand{\ADS@WRITE}[1]{\immediate\write\tf@ads{#1}}
840 \newcommand{\ADS@openfile}{%
841 \newwrite\tf@ads%
842 \immediate\openout\tf@ads\jobname.ads\relax
843 \ADS@WRITE{\ADS@preamble}}
844 \newcommand{\ADS@closefile}{\ADS@WRITE{\ADS@postamble}}
845 \def\ADS@preamble{%
846 %% \string\documentclass{article}
847 %% \string\begin{document}
848 }
849 \def\ADS@postamble{%
850 %% \string\end{document}
851 \string%\string% Local Variables:~J
852 \string%\string% mode: LaTeX~J
853 \string%\string% mode: Font-lock~J
854 \string%\string% End:~J
855 }

```

2.10 Automatic calculation of the page range

Another issue that has cost me a lot of grief. Still, it finally seems to be sorted now. All hail Jeff Goldberg.

Cunning trick to get the page numbers from \pageref. Put a label on the first and last page of the document using \AtBeginDocument and \AtEndDocument. This way won't work for the book option. In that case, we do it by defining \@endofarticlehook and \@begofarticlehook as parallels to \AtEndDocument and \AtBeginDocument.

```

856 \if@book\AtEndDocument{\ADS@closefile}\else
857 \AtBeginDocument{\@begofarticlehook}
858 \AtEndDocument{\@endofarticlehook}
859 \fi

```

`\@begofarticlehook` Since we are getting more and more things that need to be done at the beginning of every article, frontsection, etc we define a sister hook to `\@endofarticlehook`. This hook does the following:

1. Labels the first page
2. Sets `\ADS@firstpage`
3. runs and then clears `\indexauthor@deferlist`
4. resets the keyword counter

It is executed in the following circumstances:

1. At `\begin{document}` for standalone files
2. At `\begin{document}` for each included file
3. At beginning of front sections
4. At beginning of TOC
5. At beginning of Author Index
6. At beginning of abstracts

For some reason, this is not always within the right group, so we use `\xdef` just to be sure.

```

860 \newcommand{\@begofarticlehook}{%
861   \if@frontmatter\frontlabel{RMAAFirstPage}\else\label{RMAAFirstPage}\fi%
862   \xdef\ADS@firstpage{\@arabic{\c@page}}%
863   \if@book\else\makeindex\fi % needed so default index is defined in stand-alone articles
864 %%   \indexauthor@deferlist
865 %%   \xdef\indexauthor@deferlist{}
866   \inpreamblesfalse
867   \setcounter{kwdcounter}{0}
868 }

```

`\@endofarticlehook` This is a hook to be run at the end of each article currently, it just labels the last page and writes out all the ADS data to an auxiliary file. It should not produce any printed output. It is modelled on the `\AtEndDocument` command, to which it reduces in the case of a single article.

```

869 \newcommand{\@endofarticlehook}{%
870   \if@debug{\ClassWarning{rmaa}{***Doing Hook***}}\fi
871   \if@debug{\ClassWarning{rmaa}{ADSabstract is: \ADS@abstract}}\fi
872   \clearpage\rmaa@lastpagelabel\if@book\ADS@dumpdata\fi
873   \ifx\NotesList\rmaaEmpty\else\OutputNotes\fi
874   \if@debug{\ClassWarning{rmaa}{Notes list is: \NotesList}}\fi
875 }

```

`\rmaa@lastpagelabel` New version of last page label command copied from Jeff Goldberg's `lastpage.sty` package - we can't just use `\label` here in case the output routine for the last page has already been called. Instead, we first explicitly clear the page, step back

the page counter, explicitly write to the .aux file, then restep the page counter again.

Also set the \ADS@LastPage macro to the appropriate number.

```
876 \newcommand{\rmaa@lastpagelabel}{%
877   \addtocounter{page}{-1}%
878   \immediate\write\@auxout{\string
879     \newlabel{\articlename:RMAALastPage}{\the page}}}%
880 \edef\ADS@lastpage{\the page}%
881 \addtocounter{page}{1}}
```

2.11 Deal with explicit change in number of columns

Sometimes, when formatting a book, we need to switch between one-column articles and two-column articles. For this to work, we need to wrap the standard L^AT_EX commands to set the \rmtwocol flag appropriately and also reset the package default values of all scalable lengths. .

```
882 \let\latexonecolumn=\onecolumn
883 \let\latextwocolumn=\twocolumn
884 \renewcommand{\onecolumn}{\@rmtwocolfalse\@package@default@lengths\latexonecolumn}
885 \renewcommand{\twocolumn}{\@rmtwocoltrue\@package@default@lengths\latextwocolumn}
```

2.12 The actual formatting of the title

Note, we have to redefine the \maketitle command to use the numbered footnotes. This means we needn't use the atbeginend stuff.

```
886 \renewcommand{\maketitle}{\par
887   \begingroup
```

Don't switch to marked footnotes. This is consistent with existing style but I'm not sure I like it

```
888   %% \renewcommand\thefootnote{\fnsymbol{footnote}}%
889   %% \def\@makefnmark{\hbox to\z@{$\m@th^{\@thefnmark}$\hss}}%
890   \def\@makefnmark{\textsuperscript{\@thefnmark}\hspace{-0.2em}}%
891   \long\def\@makefnmark##1{\parindent 1em\noindent
892     \hbox to1.8em{\hss$\m@th^{\@thefnmark}$}\hss}%
893   \if@rmtwocol
894   { \if@debug{\ClassWarning{rmaa}{TWO COLUMN}}\fi
895     \twocolumn[\@maketitle]%
896   }
897   \else
898   { \if@debug{\ClassWarning{rmaa}{ONE COLUMN}}\fi
899     \newpage
900     \global\@topnum\z@ % Prevents figures from going at top of page.
901     \if@manuscript \@MSmaketitle \else \@maketitle \fi
902   }
903   \fi
904   \if@manuscript\else\thispagestyle{rmaafirstpage}\@thanks\fi
905   \ifx\NotesList\rmaaEmpty\else{%
906     \NoteMark{1--\arabic{notecounter}}\vspace*{-2\baselineskip}%
907   }\fi%
908   \endgroup
```

Don't reset footnote counter (not sure whether this is good thing or not).

```
909   %% \setcounter{footnote}{0}%
910   \let\thanks\relax\let\affil\relax\let\altaffil\relax
911   \let\maketitle\relax\let\@maketitle\relax
912   \gdef\@thanks{}\gdef\@author{}\gdef\@title{}}
```

\@kwhwidth Redefine \@maketitle to include the abstract, resumen and keywords. Note
\@kwtwidth that in the manuscript style we use \@MSmaketitle instead.

```

913 \newlength{\@kwhwidth}\newlength{\@kwtwidth}
914 \renewcommand{\@maketitle}{%
915   \newpage
916   \null
917   \vskip\@before@title@skip%
918   \begin{center}%
919     {\@title \par}%
920     \vskip\@before@author@skip%
921     \parbox{\rmaa@AuthorWidthFrac\textwidth}{\centering
922       \lineskip\@between@author@skip%
923       \@author
924       \par}
925     %% this should be replaced with 'Submitted to...' for preprints
926     \if@printdates
927       \vskip\@before@dates@skip%
928       \if@preprint
929         \rmaa@ReceivedStyle{Submitted to RevMexAA \@received}
930       \else
931         \rmaa@ReceivedStyle{Received \@received; accepted \@accepted}
932       \fi
933     \fi
934     \if@manuscript
935       \rmaa@ReceivedStyle{Submitted to RevMexAA \@received}
936     \fi
937     \if@guide
938       \rmaa@ReceivedStyle{Version \rmaa@version, \rmaa@date}
939     \fi
940     \vskip\@before@abstract@skip%
941     \if@abstractpresent
942       \parbox{\rmaa@AbstractWidthFrac\textwidth}{%
943         \setlength{\parindent}{0.9cm}%
944         \centerline{\rmaa@AbstractHeaderStyle{Resumen}}\par%
945         \vskip\@after@abstracthead@skip%
946         \if@newstyle\noindent\fi@resumen
947         \if@setresumen\else@abstract\fi % append english abstract if
948                                     % spanish one not set
949         \vskip\@between@abstract@skip%
950         \centerline{\rmaa@AbstractHeaderStyle{Abstract}}\par%
951         \vskip\@after@abstracthead@skip%
952         \if@newstyle\noindent\fi@abstract
953         \if@guide\else %do not use keywords for guide
954         \vskip\@before@kwd@skip%
955         % Format the Key Words with hanging indentation:
956         % They are put in a \parbox with width equal to the line width
957         % minus the width of the header.
958         { % Widths of keyword
959           \settowidth{\@kwhwidth}{\@keywordheader~} % header and
960           \setlength{\@kwtwidth}{\linewidth} % keyword text
961           \addtolength{\@kwtwidth}{-\@kwhwidth} %
962           \noindent\@keywordheader~\parbox[t]{\@kwtwidth}{%
963             \rmaa@KeywordStyle{\boldmath\uppercase{\@keywords}}}%
964           \fi
965         }
966       \fi
967     \end{center}%
968     \vspace*{\@afterkwdskip}
969     \par
970   }
971 \newlength{\@afterkwdskip}\setlength{\@afterkwdskip}{\z@}

```

`\MSmaketitle` A special version of `\maketitle` for the manuscript option. This can deal with a multi-page abstract/resumen. Not very well, mind.

```

972 \newcommand{\MSmaketitle}{%
973   \if@debug\ClassInfo{rmaa}{Using special MS maketitle command}\fi
974   \newpage
975   {
976     \thispagestyle{rmaafirstpage}
977     % \setlength{\parindent}{0pt}
978     \null\vskip 2ex
979     \begin{center}
980       \@title\par
981       \@author\par
982       \rmaa@ReceivedStyle{%
983         \ifx\@received\@rmaaEmpty
984           Draft version: \@date
985         \else
986           Received: \@received
987           \ifx\@accepted\@rmaaEmpty
988             \else
989               ; Accepted: \@accepted
990             \fi
991           \fi}\par
992     \end{center}
993     \@thanks
994     \centerline{\rmaa@AbstractHeaderStyle{Resumen}}
995     \noindent\@resumen\par\vskip 2ex
996     \centerline{\rmaa@AbstractHeaderStyle{Abstract}}
997     \noindent\@abstract\par\vskip 2ex
998     \noindent\@keywordheader~\rmaa@KeywordStyle{\@keywords}\par
999 %   \@keywordheader~\rmaa@KeywordStyle{\uppercase{\@keywords}}\par
1000 }%
1001 }
```

2.13 The sectioning commands

`\section` Redefine all the standard commands to use these lengths.

```

\subsection 1002 \renewcommand\section{\@startsection {section}{1}{\z@}%
1003               {\abovesectionskip}%
\subsubsection 1004               {\belowsectionsip}%
1005               %% how do we get upper case here
\paragraph 1006               {\centering\reset@font\normalsize}}
1007 \renewcommand\subsection{\@startsection{subsection}{2}{\z@}%
1008               {\abovesectionskip}%
1009               {\belowsectionsip}%
1010               {\centering\reset@font\normalsize\itshape}}
1011 \renewcommand\subsubsection{\@startsection{subsubsection}{3}{\z@}%
1012               {\abovesectionskip}%
1013               {\belowsectionsip}%
1014               {\centering\reset@font\normalsize\itshape}}
1015 \renewcommand\paragraph{\@startsection{paragraph}{4}{\z@}%
1016               {\aboveparaskip}%
1017               {\belowparaskip}%
1018               {\reset@font\normalsize\bfseries}}
1019 \renewcommand\subparagraph{\@startsection{subparagraph}{5}{\parindent}%
1020               {\aboveparaskip}%
1021               {\belowparaskip}%
1022               {\reset@font\normalsize\bfseries}}
```

`secnumdepth` Make sure that we number the subsubsections—this is done by default in the article class but not the book class, which is why we must set it explicitly

here.

```
1023 \setcounter{secnumdepth}{3}
```

`\thesubsection` For subsection and subsubsection, we want the numbers to be roman but the title
`\thesubsubsubsection` to be italic. This seems the easiest way to go about it.

```
1024 \renewcommand{\thesubsection}{\upshape\thesection.\@arabic\c@subsection}}
```

```
1025 \renewcommand{\thesubsubsubsection}{\thesubsection{\upshape.\@arabic\c@subsubsubsection}}
```

`\@secntformat` Add “.” to the number here so we can remove it from `\thesection`, etc. Reduce gap between number and title WJH 27 Jan 1995

```
1026 \def\@secntformat#1{\csname the#1\endcsname .\hskip 0.4em}
```

`\@sect` I didn’t really want to mess with the `\@sect` command, but it was the only way I could manage to force upper case. Other than the commented parts, it is identical to the standard version.

```
1027 \def\@sect#1#2#3#4#5#6[#7]#8{
```

```
1028   \ifnum #2>\c@secnumdepth
```

```
1029     \let\@svsec\@empty
```

```
1030   \else
```

```
1031     \refstepcounter{#1}%
```

```
1032     \let\@protect\protect
```

```
1033     \def\protect{\noexpand\protect\noexpand}%
```

```
1034     \edef\@svsec{\@secntformat{#1}}%
```

```
1035     \let\protect\@protect
```

```
1036   \fi
```

This is the bit I changed (27 Jan 1995). Use upper case for `\section`, use mixed case for the rest.

```
1037   \ifnum #2=1
```

```
1038     \def\sec@upcase##1{\uppercase{##1}}
```

```
1039   \else
```

```
1040     \def\sec@upcase##1{\relax{##1}}
```

```
1041   \fi
```

```
1042   \@tempskipa #5\relax
```

```
1043   \ifdim \@tempskipa>\z@
```

```
1044     \begingroup #6\relax
```

```
1045       \@hangfrom{\hspace #3\relax\@svsec}%
```

```
1046       {\interlinepenalty \@M \sec@upcase{#8}\par}%
```

```
1047     \endgroup
```

```
1048     \csname #1mark\endcsname{#7}
```

Only write TOC entries if doing the Guide style.

```
1049   \if@guide
```

```
1050     \addcontentsline{toc}{#1}{%
```

```
1051       \ifnum #2>\c@secnumdepth \else
```

```
1052         \protect\numberline{\csname the#1\endcsname}
```

```
1053       \fi
```

```
1054       #7}%
```

```
1055   \fi
```

```
1056 \else
```

```
1057   \def\@svsechd{#6\hspace #3\relax %% \relax added 2 May 90
```

```
1058   \@svsec #8\csname #1mark\endcsname{#7}
```

```
1059   \if@guide
```

```
1060     \addcontentsline{toc}{#1}{%
```

```
1061       \ifnum #2>\c@secnumdepth \else
```

```
1062         \protect\numberline{\csname the#1\endcsname}%
```

```
1063       \fi
```

```
1064       #7}%
```

```
1065   \fi
```

```

1066     }%
1067 \fi
1068 \@xsect{#5}}

```

2.14 Appendices

Make sure that appendices in individual articles work properly. We copy the definition from the article class (the book one doesn't do what we want), then we make the equation numbering be subordinate to the appendix (equations A12, B6, etc). Finally, we have a medskip followed by APPENDICES to introduce them (but what if there is only one!).

```

1069 \newenvironment{appendices}{\par
1070 \begingroup
1071 \setcounter{section}{0}%
1072 \setcounter{subsection}{0}%
1073 \renewcommand\thesection{\@Alph{c}section}
1074 \renewcommand\theequation{\thesection\arabic{equation}}
1075 \medskip
1076 \section*{APPENDICES}}
1077 {\endgroup}

```

2.15 Floating thingies

```

1078 \renewcommand{\thetable}{\@arabic{c}table}
1079 \renewcommand{\thefigure}{\@arabic{c}figure}
1080 \renewcommand{\figurename}{Fig.}
1081 \renewcommand{\tablename}{TABLE}
1082 %\renewcommand{\fnum@table}{\MakeUpperCase{\tablename}\thetable}

```

For some reason, I have to write 'TABLE' explicitly here. If I use \tablename, it gets converted to mixed case—God knows why. \figurename is also being ignored.

```

1083 \renewcommand{\fnum@table}{TABLE~\thetable}
1084 \renewcommand{\fnum@figure}{Fig.~\thefigure}

```

Do captions in 9 pt face in the main journal style and in new-style anything.

```

1085 \long\def\@makefigcap#1#2{%
1086 \if@proceedings\else\small\fi
1087 \if@newstyle\small\fi
1088 \vskip\abovcaptionskip
1089 \sbox\@tempboxa{#1. #2}%
1090 \ifdim \wd\@tempboxa >\hsize
1091 #1. #2 \par
1092 \else
1093 \global \@minipagefalse
1094 \hbox to\hsize{\hfil\box\@tempboxa\hfil}%
1095 \fi
1096 \vskip\belowcaptionskip}

```

Make sure table caption is upper case.

```

1097 \long\def\@maketabcap#1#2{%
1098 \hbox to\hsize{\hfil #1 \hfil}
1099 \vskip 6pt
1100 \centering\MakeUpperCase{#2}\par
1101 \vskip 6pt}
1102 \newlength{\@roottabcapwidth}
1103 \long\def\@makerottabcap#1#2{%
1104 \setbox\@tempboxa\hbox{\MakeUpperCase{#2}}%
1105 \ifdim\wd\@tempboxa >.8\vsz

```

```

1106 \setlength\roottabcapwidth{.8\vsizel}
1107 \else
1108 \setlength\roottabcapwidth{\wd\tempboxa}
1109 \fi
1110 \rotatebox{90}{%
1111 \begin{minipage}{\vsizel}\centering
1112 \begin{minipage}{\roottabcapwidth}\centering
1113 #1\ \ \vskip 6pt \MakeUpperCase{#2}
1114 \end{minipage}%
1115 \end{minipage}
1116 }%
1117 \hskip 6pt
1118 }
1119
1120 \newenvironment{Sideways}
1121 { \begin{sideways}\begin{minipage}{\vsizel}\centering
1122 { \end{minipage}\end{sideways}}
1123
1124 \newenvironment{Sidewaystable}
1125 {%
1126 \let\oldcaption=\caption%
1127 \def\caption{
1128 \def\@captive{table}\renewcommand{\@makecaption}{\@maketabcap}
1129 \oldcaption}
1130 \begin{sidewaystable}\centering}
1131 { \end{sidewaystable}\let\caption=\oldcaption}
1132 \newenvironment{Sidewaystable*}
1133 {%
1134 \let\oldcaption=\caption%
1135 \def\caption{
1136 \def\@captive{table}\renewcommand{\@makecaption}{\@maketabcap}
1137 \oldcaption}
1138 \begin{sidewaystable*}\centering}
1139 { \end{sidewaystable*}\let\caption=\oldcaption}

```

Not sure why we need to stick these lines in.

```

1140 \renewenvironment{figure}
1141 { \renewcommand{\@makecaption}{\@makefigcap}\@float{figure}}
1142 { \end@float}
1143 \renewenvironment{figure*}
1144 { \renewcommand{\@makecaption}{\@makefigcap}\@dblfloat{figure}}
1145 { \end@dblfloat}
1146 \renewenvironment{table}
1147 { \renewcommand{\@makecaption}{\@maketabcap}\@float{table}}
1148 { \end@float}
1149 \renewenvironment{table*}
1150 { \renewcommand{\@makecaption}{\@maketabcap}\@dblfloat{table}}
1151 { \end@dblfloat}

```

Redefine \@caption so that we don't bother with the list of figures. This saves us having to worry about fragile commands in the captions.

```

1152 \long\def\@caption#1[#2]#3{%
1153 \par
1154 %% \addcontentsline{\csname ext@#1\endcsname}{#1}%
1155 %% { \protect\numberline{\csname the#1\endcsname}{\ignorespaces #2}}%
1156 \begingroup
1157 \@parboxrestore
1158 \if@minipage
1159 \setminipage
1160 \fi
1161 \normalsize
1162 \@makecaption{\csname fnum#1\endcsname}{\ignorespaces #3}\par
1163 \endgroup}

```

Make tables not quite so cramped. Allow `\hline\hline` to give a poor man's thick rule.

```
1164 \renewcommand{\arraystretch}{1.15}
```

```
1165 \setlength{\doublerulesep}{0.4pt}
```

`\tablecols` `\tablecols` is a user command for setting the number of columns. It is used by commands that try and span the entire table (I think there must be a better way of achieving this). `\tabcaptioncontinued` is a user command for setting the caption of a continued table on the next page.

```
1166 \newcommand{\tablecols}[1]{\renewcommand{\@tablecols}{#1}}
```

```
1167 \newcommand{\@tablecols}{1}
```

```
1168 \newcommand{\tabcaptioncontinued}{%}
```

```
1169 \multicolumn{\@tablecols}{c}{\addtocounter{table}{-1}TABLE~\thetable\ (CONTINUED)} \\\ \\\
```

```
1170 }
```

2.15.1 Footnotes in tables

`\tablenotemark` Old user commands `\tablenotemark{MARK}`, `\tablenote{MARK}{TEXT}`—
`\tablenote` now deprecated.

```
\tablenoteskip 1171 \newcommand{\tablenotemark}[1]{\mathrel{\mkern-1mu}\mathrm{#1}}
```

```
1172 \newcommand{\tablenote}[2]{\if@proceedings\else\small\fi $\mathrm{#1}$ #2}
```

```
1173 \newcommand{\tablenoteskip}{\[0.5\baselineskip]}
```

`\tabnotemark` Alternative way of doing footnotes in tables.

```
\tabnotetext 1174 \newcommand{\tabnotemark}[1]{\textsuperscript{\lowercase{#1}}}
```

```
\tabnotetextTWO 1175 % \newcommand{\tabnotetextTWO}[4]{\tabnotetext{#1}{#2}\tabnotetext{#3}{#4}}
```

```
1176 \newcommand{\tabnotetextTWO}[4]{%}
```

```
1177 \multicolumn{\@tablecols}{l}{%}
```

```
1178 \parbox{0.5\tabnotewidth}{\small\textsuperscript{#1}#2}%
```

```
1179 \parbox{0.5\tabnotewidth}{\small\textsuperscript{#3}#4}%
```

```
1180 }%
```

```
1181 \\\}
```

```
1182 \newcommand{\tabnotetext}[2]{%}
```

```
1183 \multicolumn{\@tablecols}{@{p{\tabnotewidth}@{}}{\small\textsuperscript{#1}#2}\\\}
```

```
1184 \newlength{\tabnotewidth}
```

`changemargin`

```
1185 % Command to allow margins to be changed on the fly. Useful to allow
```

```
1186 % tables and Figures to protrude into the margins.
```

```
1187 %
```

```
1188 % \changes{3.24}{2007/09/14}{Added \texttt{changemargin} environment
```

```
1189 % (copied from TeX FAQ).}
```

```
1190 \newenvironment{changemargin}[2]{%
```

```
1191 % From TeX FAQ http://www.tex.ac.uk/cgi-bin/texfaq2html?label=chngmargonfly
```

```
1192 \begin{list}{}{%
```

```
1193 \setlength{\topsep}{0pt}%
```

```
1194 \setlength{\leftmargin}{#1}%
```

```
1195 \setlength{\rightmargin}{#2}%
```

```
1196 \setlength{\listparindent}{\parindent}%
```

```
1197 \setlength{\itemindent}{\parindent}%
```

```
1198 \setlength{\parsep}{\parskip}%
```

```
1199 }%
```

```
1200 \item[]{\end{list}}
```

2.16 The bibliography and references

`\beforebibliostkip` I'm not entirely sure why I introduced these two commands, since directly
`\afterbibliostkip` putting `\vspace` before and after `\begin{thebibliography}` seems to work

well enough.

```
1201 \newlength{\beforebibliosiskip}
1202 \setlength{\beforebibliosiskip}{0pt}
1203 \newlength{\afterbibliosiskip}
1204 \setlength{\afterbibliosiskip}{0pt}
```

`thebibliography` The environment itself is done as starred section with extra vertical space after heading. This space is currently zero. In the book style we do the cunning trick with rereading the file in order to get the references into the `\ADS@references` macro.

```
1205 \renewenvironment{thebibliography}{%
1206   \if@book\RereadBiblio\fi
1207 %%   \vspace*{\beforebibliosiskip}
1208   \section*{REFERENCES} \frenchspacing
1209 %%   \vspace*{\afterbibliosiskip}
1210   \small
```

The references themselves are set as a list in order to get the hanging indentation. They are done in a smaller font and with french spacing so we needn't worry about the distinction between sentence-ending periods and abbreviations.

```
1211 \list{\null}{\leftmargin 1.5em\labelwidth\z@\labelsep\z@\itemindent -1.5em
1212   \itemsep\z@\parsep\z@\usecounter{enumi}}
1213 \sloppy\clubpenalty4000\widowpenalty4000
1214 \sfcode'\.=1000\relax\@biblisttrue}
1215 {\endlist\@biblistfalse\normalsize\@outputaddressesifnecessary}
```

2.17 Uniquification of cross-references

`\articlename` In order that the `\label{}` command in individual articles be guaranteed to give a unique anchor, we append the article name (held in the `\articlename` command) to each key. This requires redefinition of the following commands: `\cite`, `\nocite`, `\ref`, `\pageref`, `\label`.

```
\oldcite The original versions of these commands are saved as \oldcite, \oldnocite,
\oldnocite etc.
\oldref The uniquifying of cross-references is now always done, so we don't get multiply-
\oldpageref defined labels in the single article case
\oldlabel 1216 \newcommand{\articlename}{anon}
1217 \let\oldcite=\cite
1218 \let\oldnocite=\nocite
1219 \let\oldref=\ref
1220 \let\oldpageref=\pageref
1221 \let\oldlabel=\label
```

Uniquify all cross-references by prepending the article name

```
1222 \renewcommand{\ref}[1]{\oldref{\articlename:#1}}%
1223 \if@debug{\ClassInfo{rmaa}{Reference to \articlename:#1}}\fi}
1224 \renewcommand{\pageref}[1]{\oldpageref{\articlename:#1}}%
1225 \if@debug{\ClassInfo{rmaa}{Page reference to \articlename:#1}}\fi}
1226 \renewcommand{\label}[1]{\oldlabel{\articlename:#1}}%
1227 \if@debug{\ClassInfo{rmaa}{Label for \articlename:#1}}\fi}
```

Citations are more complicated since they can contain a list of keys. These are really only here for use with the `rmaacite` package, which is utterly deprecated (02 Jan 2003) now that I have the `natbib` code working. The command `\cite` should *not* be used with `natbib`: use `\citep`, `\citet`, etc. instead.


```

1228 \renewcommand{\nocite}[1]{\@bsphack
1229   \@for\citeb:=#1\do{%
1230     \edef\citeb{\expandafter\@firstofone\citeb:\articlename}%
1231     \if@filesw\immediate\write\auxout{\string\citation{\citeb}}\fi
1232     \ifundefined{b@\citeb:\articlename}{\G@refundefinedtrue
1233       \@latex@warning{Citation '\citeb' undefined}}{}%
1234     \@esphack}
1235 \renewcommand{\cite}[1]{\oldcite{#1:\articlename}}
1236 %   \end{macrocode}
1237
1238
1239 % Horrible fiddling with the bibliography citation mechanism.
1240 % This has to be globally available in case rmaacite puts it in the
1241 % \texttt{.aux} file.
1242 %   \begin{macrocode}
1243 \def\lbibcite#1#2#3{\global\@namedef{b@#1}{#2}
1244   \global\@namedef{by@#1}{#3}}

```

Of course, `\bibitem` needs to get the unification treatment as well. While we are at it, we redefine it to use consecutive integers for the key if the user leaves it blank (using the counter `rmaabib`). This allows one to put `\bibitem{}` for all your references without getting annoying messages about multiply-defined labels.

We also take the opportunity to insert the optional argument to `\bibitem` if it is missing in the form Author(DATE) so that `natbib` doesn't try to do numerical citations. `Natbib` already provides a hook `\@extra@b@citeb` to help unquify the citation key, so we just plug into that. However, it puts it *after* the original key, not before as I had had it. Easiest solution is to change the way that I do it. 02 Jan 2003. Note that the `\@extra@b@citeb` does not get written to the `.aux` file in the `\citation` command but it does work.

```

1245 \if@natbib\def\@extra@b@citeb{:\articlename}\fi
1246 %%\else
1247 \let\oldbibitem\bibitem
1248 \newcommand{\@rmaabibArg}{}
1249 \newcommand{\@rmaaspace}{}
1250 \newcounter{rmaabib}
1251 \if@natbib
1252 \renewcommand{\bibitem}[2][ABC(2003)]{%
1253   \renewcommand{\@rmaabibArg}{#2}
1254   \ifx\@rmaabibArg\@rmaaspace
1255     \addtocounter{rmaabib}{1}
1256     \oldbibitem[#1]{\thermaabib:\articlename}
1257   \else\ifx\@rmaabibArg\@rmaaspace
1258     \addtocounter{rmaabib}{1}
1259     \oldbibitem[#1]{\thermaabib:\articlename}
1260   \else
1261     \oldbibitem[#1]{#2:\articlename}
1262   \fi\fi
1263   \renewcommand{\@rmaabibArg}{}
1264 }
1265 \else
1266 \renewcommand{\bibitem}[1]{%
1267   \renewcommand{\@rmaabibArg}{#1}
1268   \ifx\@rmaabibArg\@rmaaspace
1269     \addtocounter{rmaabib}{1}
1270     \oldbibitem{\articlename:\thermaabib}
1271   \else\ifx\@rmaabibArg\@rmaaspace
1272     \addtocounter{rmaabib}{1}
1273     \oldbibitem{\articlename:\thermaabib}

```

```

1274 \else
1275     \oldbibitem{\articlename:#1}
1276 \fi\fi
1277 \renewcommand{\@rmaabibArg}{}
1278 }
1279 \fi
1280 %%\fi

```

oldpcite Then, we need to repeat the above scheme, but for the rmaacite definition.

```

oldscite 1281 \newcommand{\@redefinebibitem}{%
1282     \let\oldbibitem\bibitem
1283     \let\oldcite\cite
1284     \let\oldpcite\pcite
1285     \let\oldscite\scite
1286     \def\bibitem[##1<##2>]##3{%
1287         \renewcommand{\@rmaabibArg}{##3}
1288         \ifx\@rmaabibArg\@rmaabibEmpty
1289             \addtocounter{rmaabib}{1}
1290             \oldbibitem[##1<##2>]{\thermaabib:\articlename}
1291         \else\ifx\@rmaabibArg\@rmaaspace
1292             \addtocounter{rmaabib}{1}
1293             \oldbibitem[##1<##2>]{\thermaabib:\articlename}
1294         \else
1295             \oldbibitem[##1<##2>]{##3:\articlename}
1296         % trust the author here
1297     %% \oldbibitem[##1<##2>]{##3}
1298     \fi\fi
1299 }
1300 }

```

2.18 HTML Table of Contents

\HyperTOCEntry These commands are used to write information to the .htoc file, which is used in generating a Web Page of the Table of Contents. Since they only ever appear preceded by \protect in the argument to an \addtocontents command, they should never need to be expanded by the macros. However, we define them here just in case ...

```

1301 \newcommand{\HyperTOCEntry}[3]{\relax}
1302 \newcommand{\HyperTOCpart}[1]{\relax}
1303 \newcommand{\HyperTOCmeeting}[3]{\relax}
1304 \newcommand{\HyperTOCeditors}[1]{\relax}
1305 \newcommand{\HyperTOCpreamble}{\relax}

```

2.19 Formatting the poster abstracts

These can now be used without using the book option.

```

1306
1307 \newcommand{\@makeminititle}{%
1308     \newpage
1309     \null
1310     \vskip 3em%
1311     \begin{center}%
1312         {\@title \par}%
1313     \end{center}
1314     \vskip 3em%
1315 }
1316
1317 \newif\if@abstractsads

```

```

1318 \@abstractsadsfalse
1319 \newcommand\abstractsADS{\@abstractsadstrue}
1320
1321 \if@book\RequirePackage{multicol}\fi
1322 \newenvironment{abstracts}[1][Abstracts of Contributed Papers]{%
1323   %% First, make sure we start on an odd page (06 Jun 2000)
1324   \if@book\clearpage\thispagestyle{empty}\cleardoublepage\fi
1325   %%
1326   \renewcommand{\articlename}{ABSTRACTS}
1327   \title{#1}\shortauthor{Abstracts}\shorttitle{Abstracts}
1328   \listofauthors{}
1329   \if@book
1330     \addcontentsline{toc}{chapter}{\protect\@fiddleauthors{\@TOCtitle}{\rmaaTOCauthors}}%
1331     \addtocontents{htc}{\protect\HyperTOCEntry{\@rawtitle}{\@rawauthors}{\articlename}}
1332   \fi
1333   \pagestyle{rmaa} % this now seems necessary (06 Jun 2000)
1334   \thispagestyle{rmaafirstpage}
1335   %% \twocolumn[\@makeminititle]
1336   \renewcommand{\abstract}[1]{%
1337     \renewcommand\ADS@abstract{##1}%
1338     \renewcommand{\@abstract}{##1}\@writeabstract%
1339   }
1340   \renewcommand{\title}[2][{}]{%
1341     \gdef\ADS@authors{}%
1342     \gdef\ADS@affil{}%
1343     \gdef\ADS@references{}%
1344     \gdef\ADS@keywords{}%
1345     \renewcommand{\@rmaaArg}{##1}
1346     \ifx\@rmaaArg\@rmaaEmpty
1347       \renewcommand{\@TOCaftertitle}{}
1348     \else
1349       \renewcommand{\@TOCaftertitle}{ (\@rmaaArg)}
1350     \fi
1351     \renewcommand{\@title}{\rmaa@TOCtitleStyle{##2}}%
1352     \renewcommand{\@TOCtitle}{\rmaa@TOCtitleStyle{##2}\@TOCaftertitle}%
1353     \renewcommand{\rmaaIndexTitle}{\rmaa@IndexTitleStyle{##2}\@TOCaftertitle.}}%
1354     \renewcommand\ADS@title{##2}%
1355     \xdef\ADS@firstpage{\@arabic{\c@page}}%
1356   }
1357   \renewcommand{\author}[1]{\let\@thanks\@empty\renewcommand\@author{##1} }
1358   \renewcommand{\footnotetext}[2][XX]{\par\noindent\textsuperscript{##1}~##2}
1359   \renewcommand{\footnoterule}{\kern-3\p@ \hrule \@width 3em \kern 2.6\p@}
1360   \if@book\@begofarticlehook\fi
1361   \if@book\begin{multicols}{2}[\@makeminititle]\else\@makeminititle\fi
1362   \begin{group}
1363     \setcounter{footnote}{0}
1364   }% and at the end of the environment....
1365   {\endgroup\if@book\end{multicols}\listofabstracts\label{RMAALastPage}\clearpage\fi}
1366 %% auxiliary commands used:
1367 %% \@writeabstract does all the actual formatting
1368 \newcommand{\@writeabstract}{%
1369   \if@book%
1370     \addcontentsline{loa}{abstract}{\protect\@fiddleauthors{\@TOCtitle}{\rmaaTOCauthors}}%
1371     \fi%
1372     \begin{center}\@title\par\@author\end{center}
1373     \@abstract
1374     \par\noindent\footnoterule\nobreak\footnotesize\@thanks
1375     \par\noindent\hrulefill\goodbreak
1376     \vskip 1cm \@plus0.5cm
1377     %% write ADS entry
1378     \if@book\if@abstractsads\ADS@dumpdata\fi\fi%
1379   \endgroup % this pair is to make each abstract a self-contained group

```

```

1380 \begin{group
1381 \setcounter{footnote}{0}
1382 }
1383
1384 \if@book
1385 %% List of abstracts (stuff written to .loa file)
1386 \newcommand{\listofabstracts}{%
1387 \begin{multicols}{2}{%
1388 \vskip 1.5cm \vfill % leave at least 1.5 cm and go to bottom of page if possible
1389 \centerline{\MakeUpperCase{List of Abstracts}}
1390 \vskip 1.5cm \@plus0.5cm
1391 ][6cm] % this makes it start a new page if there is not at least 6cm of space
1392 \renewcommand{\@fiddleauthors}[2]{##1\hskip1em plus2em minus0.4em\penalty-100 ##2}
1393 \parindent\z@
1394 %% \parskip.5\p@ \@plus .7\p@\relax
1395 \parskip3\p@ \@plus 1\p@ \@minus 1\p@\relax % allow quite a lot of
1396 % leeway here to avoid breaks inside
1397 % entries
1398 \renewcommand{\@}{\relax} % temporarily turn off explicit line breaks just in case
1399 \renewcommand{\altaffilmark}[1]{\relax} % ditto with this
1400 \@starttoc{loa}
1401 \end{multicols}
1402 }
1403 \newcommand*{\l@abstract}[2]{%
1404 \par\penalty-1000
1405 #1\hskip 1em\penalty0\null\nobreak\hfill#2}
1406 \fi
1407

```

2.20 Code for typesetting an entire volume of conference proceedings

```

1408
1409 \if@book
1410 %% environment for including the individual articles
1411 \newcommand{\@fiddleauthors}[2]{\relax}
1412 \renewcommand{\theequation}{\@arabic\c@equation}
1413 \newenvironment{articles}%
1414 { \begin{group} % make it a group so that author definitions do not
1415 % spill over
1416 \gdef\ADS@authors{}
1417 \pagestyle{rmaa}
1418 \renewenvironment{document}{%
1419 \@begofarticlehook
1420 \addtocounter{chapter}{1}%
1421 \addcontentsline{toc}{chapter}{%
1422 \protect\@fiddleauthors{\@TOCtitle}{\rmaaTOCauthors}}%
1423 \addtocontents{htc}{\protect\HyperTOCEntry{\@rawtitle}{\@rawauthors}{\articlename}}
1424 }{\relax}
1425 \renewcommand{\documentclass}[2][foo]{\relax}
1426 \renewcommand{\usepackage}[2][foo]{%
1427 \def\@packagename{##2}\def\@rmaacitenamename{rmaacite}%
1428 \ifx\@packagename\@rmaacitenamename
1429 \rmcitettrue\ClassInfo{rmaa}{This paper uses rmaacite}
1430 \makeatletter\input{rmaacite.sty}\makeatother % read it in here so that all changes
1431 % are local to paper
1432 \if@debug\ClassWarning{rmaa}{Package \@packagename\space was requested by \articlename\s}
1433 \fi}
1434 %% Don't allow individual articles to mess with the pages, volume or year
1435 \renewcommand{\SetFirstPage}[1]{\relax}
1436 \renewcommand{\SetYear}[1]{\relax}

```

```

1437 \renewcommand{\SetVolume}[1]{\relax}
1438 \renewcommand{\SetConfTitle}[1]{\relax}
1439 %% Don't allow individual articles to change these
1440 \renewcommand{\nonstopmode}{\relax}
1441 \renewcommand{\scrollmode}{\relax}
1442 \renewcommand{\outputplates}{\relax}
1443 %% XXXX need to check if using rmaacite and act accordingly
1444 %% avoid multiple declarations of the same length
1445 \let\oldnewlength=\newlength
1446 \renewcommand{\newlength}[1]{%
1447   \edef\reserved@a{\expandafter\@gobble\string #1}%
1448   \@ifundefined{\reserved@a}{%
1449     \oldnewlength{#1}}{%
1450     \if@debug{\ClassInfo{rmaa}{\reserved@a space already defined: doing nothing}}\fi%
1451     \relax}%
1452   \renewcommand\newcommand{\providecommand}
1453 }%
1454 {\endgroup\onecolumn}
1455
1456

```

Command to be used in 'articles' environment for including an article

```

1457 \newcommand{\article}[2][{}]{%
1458   % optional first argument is extra text to put in brackets after title in TOC
1459   % e.g. ``Invited Talk'' or ``Poster''
1460   \renewcommand{\articlename}{#2}
1461   % reset loads of counters
1462   \setcounter{footnote}{0}
1463   \setcounter{figure}{0}
1464   \setcounter{table}{0}
1465   \setcounter{section}{0}
1466   \setcounter{equation}{0}
1467   \setcounter{rmaabib}{0}
1468   \gdef\ADS@authors{}%
1469   \gdef\ADS@affil{}%
1470   \gdef\ADS@references{}%
1471   \@firstauthortrue
1472   \@firstaffiltrue
1473   \@firstaltaffiltrue
1474   \@firstkwtrue
1475   \rmcitetfalse
1476   \if@suppressfulladdresses\else\@needaddressestrue\fi
1477   \renewcommand{\@rmaaArg}{#1}
1478   \ifx\@rmaaArg\@rmaaEmpty
1479     \renewcommand{\@TOCaftertitle}{}
1480   \else
1481     \renewcommand{\@TOCaftertitle}{ (#1)}
1482   \fi

```

In the main journal articles must start on an odd page.

```

1483 \if@journal\clearpage\thispagestyle{empty}\cleardoublepage\fi
1484 %% Now input the file, then run the end-of-article hook (reinstated 28
1485 %% Sep 2001)
1486 {\input{\@articledir/\articlename.tex}\@endofarticlehook}

```

Command to separate articles into sessions. Write an entry in the TOC, makes sure we start on an odd page (added 06 Jun 2000), then do a title page if \SessionTitlePages was called.

```

1487 \newcommand{\session}[1]{
1488   %% this does nothing except write an entry in the TOC
1489   \addcontentsline{toc}{part}{\rmaa@TOCPartStyle{#1}}
1490   \addtocontents{htc}{\protect\HyperTOCpart{#1}}
1491   %% and also makes sure we start on an odd page (added 06 Jun 2000)

```

```

1492 \clearpage\thispagestyle{empty}\cleardoublepage
1493 \stepcounter{part}
1494 \if@sessiontitlepages{%
1495     \onecolumn
1496     \thispagestyle{empty}
1497     \renewcommand{\articlename}{Section\thepart TitlePage}
1498     \label{RMAAFirstPage}
1499     \make@session@title{#1}
1500     \label{RMAALastPage}
1501     \clearpage\thispagestyle{empty}\cleardoublepage
1502 } \fi
1503 }
1504 \newcommand{\make@session@title}[1]{%
1505     {%
1506         \setlength\parindent{0pt}
1507         \vspace*{\stretch{1}}
1508         \rule{\linewidth}{1mm}
1509         \begin{flushright}\Huge\bfseries\boldmath
1510             #1
1511         \end{flushright}
1512         \rule{\linewidth}{1mm}
1513         \vspace*{\stretch{2}}
1514     }
1515 }

```

Command to turn on separate title pages for each session.

```

1516 \newcommand{\SessionTitlePages}{\@sessiontitlepagetrue}
1517 \newcommand{\BoldSessionTitles}{%
1518     \renewcommand{\rmaa@TOCPartStyle}[1]{\textbf{\rmaa@TOCTitleStyle{##1}}}
1519 }
1520 \newcommand{\ArticleDir}[1]{\renewcommand{\@articledir}{#1}\graphicspath{{1/}}}
1521 \newcommand{\@articledir}{.}
1522 %\newcommand{\ps@rmaafront}{\ps@rmaa}% page style for front matter (same as ever, actually)
1523 \newcommand{\ps@rmaafront}{% page style for front matter: page # in each foot
1524     \renewcommand\@oddfoot{\hfil\thepage}}%
1525     \renewcommand\@evenfoot{\thepage\hfil}%
1526     % shorttitle in both heads
1527     \renewcommand\@evenhead{\hfil\shorttitle\hfil}%
1528     \renewcommand\@oddhead{\@evenhead}
1529 }
1530 \newcommand{\ps@rmaafrontfirstpage}{% page style for first page of front matter
1531     % page # in each foot, on outside edge
1532     \renewcommand\@oddfoot{\hfil\thepage}%
1533     \renewcommand\@evenfoot{\thepage\hfil}%
1534     % nothing in the even heads
1535     \renewcommand\@evenhead{\relax}%
1536     \renewcommand\@oddhead{\relax}%
1537 }
1538 %% slight modification to the standard \frontmatter and \mainmatter
1539 %% commands, just to set the \pagestyle
1540 \renewcommand\frontmatter{%
1541     \latexonecolumn
1542     \cleardoublepage
1543     \@frontmattertrue
1544     \@mainmatterfalse
1545     \pagenumbering{roman}
1546     \pagestyle{rmaafront}
1547     \addtocounter{page}{2} % leave space for the title page
1548 }
1549 \renewcommand\mainmatter{%
1550     \pagestyle{empty}
1551     \if@rmtwocol\twocolumn\fi
1552     \cleardoublepage

```

```

1553 \@frontmatterfalse
1554 \@mainmattertrue
1555 \pagenumbering{arabic}
1556 \pagestyle{rmaa}
1557 }
1558 \renewcommand\backmatter{%
1559 \clearpage\pagestyle{empty}\cleardoublepage
1560 \@mainmatterfalse
1561 %% put extra space in the TOC
1562 \addtocontents{toc}{\bigskip}
1563 }

```

2.21 Front sections

`\notitle` The environment `frontsection` is for doing a section in the front matter (preface, list of participants, or whatever). It has one optional argument:
`\shortname`
`frontsection`

#1 Short title (no embedded spaces) for use in making PS files. E.g., “list_of_participants”.

and two mandatory arguments:

#2 Title of section (e.g., ‘Preface’)

#3 Commands to be evaluated before processing the contents of the environment. This is mainly useful for putting in the things that would go in the preamble of a normal article (e.g., `\listofauthors`, `\indexauthor`, `\notitle`)

```

1564 \newcommand{\notitle}{\@titlevisiblefalse} \newcommand{\shortname}{}
1565 \newenvironment{frontsection}[3][{}%
1566 \begin{group
1567 \renewcommand{\shortname}{#1}
1568 \ifx\shortname\@rmaaEmpty
1569 \renewcommand{\articlename}{#2}
1570 \else
1571 \renewcommand{\articlename}{\shortname}
1572 \fi
1573 \@begofarticlehook
1574 \@titlevisibletrue % default
1575 \thispagestyle{rmaafirstpage}
1576 \listofauthors{} % blank out this in case it is not specified
1577 \title{#2}\shorttitle{#2}\shortauthor{#2}
1578 #3 % evaluate the command given as second mandatory arg
1579 \addcontentsline{toc}{chapter}{\protect\@fiddleauthors{\@TOCtitle}{\rmaaTOCauthors}}%
1580 \addtocontents{htc}{\protect\HyperTOCEntry{\@rawtitle}{\@rawauthors}{\articlename}}
1581 \if@titlevisible
1582 \vspace*{1cm}\centerline{\rmaa@FrontSecStyle{\@title}}\vspace*{1cm}
1583 \fi
1584 \setlength{\parskip}{3ex}
1585 }\frontlabel{RMAALastPage}\clearpage\endgroup}

1586 %% Definition of the command \frontlabel, which rights out something like 'F4' to
1587 %% the .aux file, instead of '\textlatin{i}'. This is so it is easy to post-process
1588 %% the file for making PS files of individual sections
1589 \newcommand{\frontlabel}[1]{%
1590 \bsphack
1591 \protected@write\auxout{}%
1592 {\string\newlabel{\articlename:#1}{F@arabic{c@page}}}%
1593 \esphack
1594 }

1595 %% User command to say X, Y, Z,\\ Editors of the Proceedings
1596 \newcommand{\EditorSignature}{\vspace*{\parskip}\rightline{\@editors}}%

```

```

1597 \rightline{Editors of the proceedings}}
1598 %% Fiddle with \thesection, etc. so that they don't include the chapter number
1599 %% Basically go back to the 'article' definitions of these
1600 \renewcommand{\thesection}{\@arabic\c@section}
1601 \renewcommand{\thefigure}{\@arabic\c@figure}
1602 \renewcommand{\thetable}{\@arabic\c@table}
1603
1604 \newcommand{\@oldargs}{}
1605 \newcommand{\@newargs}{}
1606 %% add TOC entry for each paper
1607 \renewcommand{\title}[1]{%
1608 %\renewcommand{\@title}{\rmaa@TitleStyle{#1}}%
1609 %\addtocounter{chapter}{1}\addcontentsline{toc}{chapter}{#1}%
1610 }
1611
1612 %% Formatting of the table of contents
1613 %% dimensions of various parts
1614 \newlength{\TOCtextwidth}\setlength{\TOCtextwidth}{12.65cm}
1615 \newlength{\TOCpagenumwidth}\setlength{\TOCpagenumwidth}{1.3cm}
1616 \newlength{\TOCentrywidth}\setlength{\TOCentrywidth}{\TOCtextwidth}
1617 \addtolength{\TOCentrywidth}{-\TOCpagenumwidth}
1618 \newlength{\TOCextramargin}\setlength{\TOCextramargin}{1.25cm}
1619 \newcommand{\TOCbox}[1]{\hspace{\TOCextramargin}\parbox{\TOCtextwidth}{#1}\par}
1620 \newlength{\TOCextramarginx}\setlength{\TOCextramarginx}{\TOCextramargin}\addtolength{\TOCextramarginx}{\TOCtextwidth}
1621 \newlength{\TOCtextwidthx}\setlength{\TOCtextwidthx}{\TOCtextwidth}\addtolength{\TOCtextwidthx}{\TOCextramarginx}
1622 \newcommand{\TOCboxx}[1]{\hspace{\TOCextramarginx}\parbox{\TOCtextwidthx}{#1}\par}
1623
1624 \newcommand{\RMAAbannerimage}{rmssc}
1625 \renewcommand\tableofcontents{%
1626 \begin{group}
1627 \begin{group}
1628 \begin{group}
1629 \if@twocolumn
1630 \@restonecoltrue\onecolumn
1631 \else
1632 \@restonecolfalse
1633 \fi
1634 %% 9pt for journal style
1635 \if@proceedings\else\small\fi
1636 \if@newstyle\small\fi %% same for new style
1637 \if@proceedings\thispagestyle{rmaafirstpage}\else\thispagestyle{empty}\fi
1638 \shortauthor{Contents}\shorttitle{Contents}
1639 \vspace*{18mm}
1640 \if@printbanner
1641 %% put in the banner header (need to get better image of this)
1642 \TOCbox{\hspace*{-0.15cm}\includegraphics[width=0.9\TOCtextwidth]{\RMAAbannerimage}}
1643 \vspace*{8mm}
1644 %% volume and publication date (should really be in funny font)
1645 \TOCboxx{\@volumen\[\[2mm] \@mes\ \@anyo}
1646 \else
1647 %% put in the banner header (need to get better image of this)
1648 \TOCbox{\hspace*{-0.15cm}\includegraphics[width=0.9\TOCtextwidth]{\RMAAbannerimage}}
1649 \vspace*{12.5mm}
1650 %% volume and publication date (should really be in funny font)
1651 \TOCboxx{\[\[2mm] ~}
1652 \fi
1653 \vspace*{16mm}
1654 %% This is the command that fiddles with the TOC entry so that the
1655 %% title is flushleft but the authors are flushright
1656 \renewcommand{\@fiddleauthors}[2]{%
1657 % first put the paper title
1658 \renewcommand{\@}{\relax} % temporarily turn off explicit line breaks just in case

```



```

1659 \renewcommand{\altaffilmark}[1]{\relax} % ditto with this
1660 \renewcommand{\textsuperscript}[1]{\relax} % ditto with this
1661 ##1
1662 % now save the author list in a box
1663 \sbox\@tempboxa{##2}%
1664 % check that box is shorter than the total width available for the entry
1665 \ifdim \wd\@tempboxa <\TOCentrywidth
1666     % if so, then put it right here, flush against right margin
1667     \penalty10000\hskip1em\penalty0\hbox{\nobreak\hfill\box\@tempboxa}
1668     % Note that we force a space of at least 1em between title and authorlist,
1669     % stretchable to 11em since we may have very short titles but still with an
1670     % authorlist too long to go on the same line. The only linebreak allowed is
1671     % directly before the authorlist.
1672 \else
1673     % if it is too long, we set the original authorlist text in its own parbox
1674     \par\vskiplex\parbox[b]{\TOCentrywidth}{\raggedleft ##2}
1675 \fi
1676 }
1677 \@starttoc{toc}%
1678 \if@restonecol\twocolumn\fi
1679 \frontlabel{RMAALastPage}
1680 \clearpage
1681 \thispagestyle{empty}
1682 \cleardoublepage % make sure we start on an odd page
1683 \endgroup
1684
1685 %%% ALSO, do the HTML TOC
1686 %% The file that will be used to make the HTML TOC
1687 \@starttoc{htc}
1688 %% All the stuff in this file does nothing in the book style
1689 \addtocontents{htc}{\protect\HyperTOCmeeting{\@conftitle}{\@reunionplace}{\@reuniondate}}
1690 \addtocontents{htc}{\protect\HyperTOCeditors{\@editors}}
1691 \addtocontents{htc}{\protect\HyperTOCpreamble}
1692 \addtocontents{htc}{\protect\HyperTOCentry{Table of Contents}{\@articlename}}
1693
1694 %% and the ADS file
1695 \ADS@openfile
1696 }
1697 %% This is now much simpler
1698 \renewcommand\l@chapter[2]{%TOC entry for articles
1699     \ifnum \c@tocdepth >\m@ne
1700         \vskip 1.0em \@plus\p@
1701         \TOCbox{%
1702             \parbox[b]{\TOCentrywidth}{#1}\parbox[b]{\TOCpagemwidth}{\hfill#2}
1703         }
1704     \fi}
1705 \renewcommand\l@part[2]{%TOC entry for sessions: centered, no page number
1706     \ifnum \c@tocdepth >\m@ne
1707         \vskip 1.5em \@plus1.5em \goodbreak
1708         \TOCbox{%
1709             \parbox[b]{\TOCentrywidth}{\hfil#1\hfil}\hfill
1710         }
1711     \fi\nobreak}
1712
1713 %%% Formatting theindex
1714 %%% strongly encourage page breaks between index entries
1715 \renewcommand{\@idxitem}{\par\penalty-1000\hangindent.45cm}
1716 \renewcommand{\indexspace}{\par\penalty-1000\vskip 10\p@ \@plus15\p@ \@minus3\p@\relax}
1717 \renewenvironment{theindex}{%
1718     %% first, make sure we start on an odd page (06 Jun 2000)
1719     \clearpage\thispagestyle{empty}\cleardoublepage
1720     %% this looks a bit like an article but is two columns and without abstract, etc

```

```

1721 \renewcommand{\articlename}{INDEX}
1722 \title{Author Index}\shortauthor{Author Index}\shorttitle{Author Index}
1723 \listofauthors{}
1724 \addcontentsline{toc}{chapter}{\protect\@fiddleauthors{\@TOCtitle}{\rmaaTOCauthors}}%
1725 \addtocontents{htc}{\protect\HyperTOCEntry{\@rawtitle}{\@rawauthors}{\articlename}}
1726 \pagestyle{rmaa}
1727 \thispagestyle{rmaafirstpage}
1728 \@begofarticlehook
1729 %% 9pt for journal style
1730 \if@proceedings\else\small\fi
1731 \if@newstyle\small\fi
1732 \twocolumn[\@makeminititle]
1733 %% vertical spacing (see also definition of \@idxitem and \indexspace
1734 \parskip\z@ \@plus .6\p@\relax % allow quite a lot of leeway here to avoid breaks inside e
1735 %% horizontal spacing, breaking and glue parameters (see also the stuff in the definition
1736 %% of \indexauthor
1737 \parindent\z@
1738 \exhyphenpenalty10000 % don't break on explicit hyphens, it always looks bad
1739 \rightskip=0pt plus.2em % allow a tiny bit of leeway at the ends of lines
1740 \spaceskip.3333em plus.5em minus.15em % a lot of leeway between words
1741 \xspaceskip.5em plus.5em minus.4em % this seems to have no effect
1742 \let\item\@idxitem
1743 \renewcommand{\}\{\relax} % temporarily turn off explicit line breaks just in case
1744 \renewcommand{\altaffilmark}[1]{\relax} % ditto with this
1745 \renewcommand{\textsuperscript}[1]{\relax} % ditto with this
1746 {\label{RMAALastPage}\clearpage} % clearpage necessary so that we know about \shortauthor
1747
1748
1749
1750 %% end definitions for book styles
1751 \fi
1752

```

In order to do away with plates, we sometimes want a figure to appear in color only in the online version. The following command can be used in a figure caption to typeset a note to this effect.

```

1753 \newcommand\ColorOnlineOnly{%
1754   \textsc{Note: this figure is available in color in the electronic
1755     version of this article, obtainable from}
1756   \texttt{http://\discretionary{}{}{}www.\discretionary{}{}{}astroscu.\discretionary{}{}{}un
1757 }%% Plates
1758 %% Define 2 counters: plate is the number in the whole document, plateloop is used
1759 %% internally by \outputplates
1760 \newcounter{plate}
1761 \newcounter{plateloop}
1762 %% Currently limited to 15 plates in document
1763 %% when we do a label, we need to write to \newlabel entries to the .aux file, one
1764 %% that says RMAAPlateX so that it can be referred to in \outputplates, and one that
1765 %% says articlename:RMAAPlateX so that the dvips program can find it and associate it
1766 %% with the right article
1767 \newcommand{\@platelabeli}{\oldlabel{RMAAPlate1}\label{RMAAPlate1}}
1768 \newcommand{\@platelabelii}{\oldlabel{RMAAPlate2}\label{RMAAPlate2}}
1769 \newcommand{\@platelabeliii}{\oldlabel{RMAAPlate3}\label{RMAAPlate3}}
1770 \newcommand{\@platelabeliv}{\oldlabel{RMAAPlate4}\label{RMAAPlate4}}
1771 \newcommand{\@platelabelv}{\oldlabel{RMAAPlate5}\label{RMAAPlate5}}
1772 \newcommand{\@platelabelvi}{\oldlabel{RMAAPlate6}\label{RMAAPlate6}}
1773 \newcommand{\@platelabelvii}{\oldlabel{RMAAPlate7}\label{RMAAPlate7}}
1774 \newcommand{\@platelabelviii}{\oldlabel{RMAAPlate8}\label{RMAAPlate8}}
1775 \newcommand{\@platelabelix}{\oldlabel{RMAAPlate9}\label{RMAAPlate9}}
1776 \newcommand{\@platelabelx}{\oldlabel{RMAAPlate10}\label{RMAAPlate10}}
1777 \newcommand{\@platelabelxi}{\oldlabel{RMAAPlate11}\label{RMAAPlate11}}
1778 \newcommand{\@platelabelxii}{\oldlabel{RMAAPlate12}\label{RMAAPlate12}}

```

```

1779 \newcommand{\@platelabelxiii}{\oldlabel{RMAAPlate13}\label{RMAAPlate13}}
1780 \newcommand{\@platelabelxiv}{\oldlabel{RMAAPlate14}\label{RMAAPlate14}}
1781 \newcommand{\@platelabelxv}{\oldlabel{RMAAPlate15}\label{RMAAPlate15}}
1782 \newcommand{\@outputplatelabeli}{\oldlabel{RMAAOutputPlate1}}
1783 \newcommand{\@outputplatelabelii}{\oldlabel{RMAAOutputPlate2}}
1784 \newcommand{\@outputplatelabeliii}{\oldlabel{RMAAOutputPlate3}}
1785 \newcommand{\@outputplatelabeliv}{\oldlabel{RMAAOutputPlate4}}
1786 \newcommand{\@outputplatelabelv}{\oldlabel{RMAAOutputPlate5}}
1787 \newcommand{\@outputplatelabelvi}{\oldlabel{RMAAOutputPlate6}}
1788 \newcommand{\@outputplatelabelvii}{\oldlabel{RMAAOutputPlate7}}
1789 \newcommand{\@outputplatelabelviii}{\oldlabel{RMAAOutputPlate8}}
1790 \newcommand{\@outputplatelabelix}{\oldlabel{RMAAOutputPlate9}}
1791 \newcommand{\@outputplatelabelx}{\oldlabel{RMAAOutputPlate10}}
1792 \newcommand{\@outputplatelabelxi}{\oldlabel{RMAAOutputPlate11}}
1793 \newcommand{\@outputplatelabelxii}{\oldlabel{RMAAOutputPlate12}}
1794 \newcommand{\@outputplatelabelxiii}{\oldlabel{RMAAOutputPlate13}}
1795 \newcommand{\@outputplatelabelxiv}{\oldlabel{RMAAOutputPlate14}}
1796 \newcommand{\@outputplatelabelxv}{\oldlabel{RMAAOutputPlate15}}
1797 \newcommand{\@plateref i}{\oldpageref{RMAAPlate1}}
1798 \newcommand{\@plateref ii}{\oldpageref{RMAAPlate2}}
1799 \newcommand{\@plateref iii}{\oldpageref{RMAAPlate3}}
1800 \newcommand{\@plateref iv}{\oldpageref{RMAAPlate4}}
1801 \newcommand{\@plateref v}{\oldpageref{RMAAPlate5}}
1802 \newcommand{\@plateref vi}{\oldpageref{RMAAPlate6}}
1803 \newcommand{\@plateref vii}{\oldpageref{RMAAPlate7}}
1804 \newcommand{\@plateref viii}{\oldpageref{RMAAPlate8}}
1805 \newcommand{\@plateref ix}{\oldpageref{RMAAPlate9}}
1806 \newcommand{\@plateref x}{\oldpageref{RMAAPlate10}}
1807 \newcommand{\@plateref xi}{\oldpageref{RMAAPlate11}}
1808 \newcommand{\@plateref xii}{\oldpageref{RMAAPlate12}}
1809 \newcommand{\@plateref xiii}{\oldpageref{RMAAPlate13}}
1810 \newcommand{\@plateref xiv}{\oldpageref{RMAAPlate14}}
1811 \newcommand{\@plateref xv}{\oldpageref{RMAAPlate15}}
1812 \newcounter{figplatei}
1813 \newcounter{figplateii}
1814 \newcounter{figplateiii}
1815 \newcounter{figplateiv}
1816 \newcounter{figplatev}
1817 \newcounter{figplatevi}
1818 \newcounter{figplatevii}
1819 \newcounter{figplateviii}
1820 \newcounter{figplateix}
1821 \newcounter{figplatex}
1822 \newcounter{figplatexi}
1823 \newcounter{figplatexii}
1824 \newcounter{figplatexiii}
1825 \newcounter{figplatexiv}
1826 \newcounter{figplatexv}
1827 %% Printed output should use the counter 'plate'
1828 \renewcommand{\theplate}{\@arabic{c@plate}}
1829 \renewcommand{\theplateloop}{\@arabic{c@plateloop}}
1830 %% Command to output all the saved plates in this paper
1831 \newcommand{\outputplates}{%
1832   \setcounter{plateloop}{0}
1833   \if@book\else\endofarticlehook\fi % not entirely sure why, but this
1834                                     % seems to be needed
1835   \clearpage % first output the last page of text
1836   % now set pagestyle for blank even pages and make sure we start on an odd page
1837   \pagestyle{empty}
1838   \cleardoublepage
1839   \onecolumn
1840   \parindent\z@

```

```

1841 % first put in an extra sheet
1842 % the main purpose of this is so there is always a blank even page before
1843 % each plate for filling in the PS file if the article has an odd number
1844 % of pages (see splitbook.sh)
1845 \null\vfil\centerline{PLATES}\vfil\clearpage\pagestyle{rmaaplate}\cleardoublepage
1846 % output each plate in turn
1847 \@whilenum\value{plateloop}<\value{plate}\do{%
1848   \addtocounter{plateloop}{1}
1849   % restore the figure counter from \@figcounti, \@figcountii, etc
1850   \setcounter{figure}{\value{figplate}\roman{plateloop}}
1851   % spew out the plate (in its own group for safety)
1852   {\csname @plate\roman{plateloop}\endcsname\par}
1853 }
1854 \pagestyle{rmaa}
1855 % reset the page number as if nothing had happened
1856 \addtocounter{page}{-\value{plate}}
1857 \addtocounter{page}{-\value{plate}}
1858 }
1859 \newcommand\figcaption{%
1860   \def\@capytype{figure}
1861   \renewcommand{\@makecaption}{\@makefigcap}
1862   \caption}
1863 \newcommand\tabcaption{%
1864   \def\@capytype{table}
1865   \renewcommand{\@makecaption}{\@maketabcap}
1866   \caption}
1867
1868 \newcommand{\plate}[2][1]{%
1869   %% User command to make a plate page:
1870   %% Mandatory argument is what goes on the plate - this should not
1871   %% include any floating environments (e.g. figure). Instead, \figcaption
1872   %% should be used to do the captions.
1873   %% Optional argument is the number of figures (i.e. captions) on the plate
1874   %% page (default is 1). This is necessary for incrementing the figure counter.
1875   %%
1876   %% Note that we have to use a \gdef rather than an \xdef when we
1877   %% save the plate output in a command. This means that in the book styles when it
1878   %% comes to spewing out the plate, we will have forgotten about any user macros
1879   %% that may have been defined. This can be got round by repeating the macros inside the pl
1880   %% (Presumably, one would use a \newcommand rather than \renewcommand if they were new.)
1881   % increment global and local counters
1882   \addtocounter{plate}{1}
1883   % write appropriate label to .aux file
1884   \csname @platelabel\roman{plate}\endcsname
1885   % define a global macro called \@platei, \@plateii, \@plateiii, \@plateiv, ...
1886   \expandafter\gdef\csname @plate\roman{plate}\endcsname{%
1887     \csname @outputplatelabel\roman{plateloop}\endcsname
1888     \null\vfil #2 \vfil
1889     \cleardoublepage
1890   }
1891   % save the current shortauthor and shorttitle
1892   % need to be \xdef to take current values of \@shortauthor, etc
1893   \expandafter\xdef\csname @shorta\roman{plate}\endcsname{\@shortauthor}
1894   \expandafter\xdef\csname @shortt\roman{plate}\endcsname{\@shorttitle}
1895   % save the current value of the figure counter for later use in \outputplates
1896   \setcounter{figplate\roman{plate}}{\value{figure}}
1897   % increment the figure counter according to the optional argument
1898   \addtocounter{figure}{#1}
1899 }
1900 %% page style for plate pages
1901 \newcommand{\ps@rmaaplate}{%
1902   % Plate X (see page Y) in the foot

```

```

1903 \renewcommand\@oddfoot{\hfil\csname @shorta\roman{plateloop}\endcsname\
1904 (see page~\csname @platerref\roman{plateloop}\endcsname)\hfil}%
1905 \renewcommand\@evenfoot{\relax}%
1906 % nothing in even heads (blank pages)
1907 \renewcommand\@evenhead{\relax}
1908 % short title and page num in the odd heads
1909 \renewcommand\@oddhead{\hfil\csname @shortt\roman{plateloop}\endcsname%
1910 \hfil\llap{PLATE~\theplateloop}}
1911 }
1912
1913
1914
1915
1916
1917%% Things for the User Guide
1918\if@guide
1919%% stolen from doc.sty
1920\def\MakeShortVerb#1{%
1921 \expandafter\ifx\csname cc\string#1\endcsname\relax
1922 \@shortvrbinfo{Made }{#1}%
1923 \add@special{#1}%
1924 \expandafter
1925 \xdef\csname cc\string#1\endcsname{\the\catcode'#1}%
1926 \begingroup
1927 \catcode'\~\active \lccode'\~'#1%
1928 \lowercase{%
1929 \global\expandafter\let
1930 \csname ac\string#1\endcsname~%
1931 \gdef{\verb~}}%
1932 \endgroup
1933 \global\catcode'#1\active
1934 \else
1935 \@shortvrbinfo\@empty{#1 already}%
1936 \fi}
1937\def\DeleteShortVerb#1{%
1938 \expandafter\ifx\csname cc\string#1\endcsname\relax
1939 \else
1940 \@shortvrbinfo{Deleted }{#1 as}%
1941 \rem@special{#1}%
1942 \global\catcode'#1\csname cc\string#1\endcsname
1943 \global \expandafter\let \csname cc\string#1\endcsname \relax
1944 \ifnum\catcode'#1=\active
1945 \begingroup
1946 \catcode'\~\active \lccode'\~'#1%
1947 \lowercase{%
1948 \global\expandafter\let\expandafter~%
1949 \csname ac\string#1\endcsname}%
1950 \endgroup \fi \fi}
1951\def\@shortvrbinfo#1#2{%
1952 \PackageInfo{doc}{%
1953 #1\expandafter\@gobble\string#2 a short reference
1954 for \string\verb}}
1955\def\add@special#1{%
1956 \rem@special{#1}%
1957 \expandafter\gdef\expandafter\dospecials\expandafter
1958 {\dospecials \do #1}%
1959 \expandafter\gdef\expandafter\@sanitize\expandafter
1960 {\@sanitize \makeother #1}}
1961\def\rem@special#1{%
1962 \def\do##1{%
1963 \ifnum'#1='##1 \else \noexpand\do\noexpand##1\fi}%
1964 \xdef\dospecials{\dospecials}%

```

```

1965 \begingroup
1966 \def\@makeother##1{%
1967 \ifnum'#1='##1 \else \noexpand\@makeother\noexpand##1\fi}%
1968 \xdef\@sanitize{\@sanitize}%
1969 \endgroup}
1970 %% define | as shortcut for \verbatim
1971 \MakeShortVerb{\|}
1972 %% comand to specify arguments to LaTeX commands
1973 \newcommand{\rmArg}[1]{%
1974 \ensuremath{\langle}\scriptsize \textsf{\MakeUpperCase{#1}}\ensuremath{\rangle}}
1975 %\newcommand{\rmArg}[1]{\ensuremath{\langle}\textsc{#1}\ensuremath{\rangle}}
1976 \providecommand{\BibTeX}{\rmfamily B\kern-.05em%
1977 \textsc{i\kern-.025em b}\kern-.08em%
1978 T\kern-.1667em\lower.7ex\hbox{E}\kern-.125emX}}
1979 %% Environment for code examples
1980 \newenvironment{Code}{%
1981 \begin{list}{}{\setlength{\leftmargin}{0.05\columnwidth}}
1982 \item[]\end{list}}
1983 \fi
1984 \endpackage

```

3 User commands for astronomical articles

Some random definitions. These go both into the main class file and also into `adshtml.sty`.

Definitions of the journal name in different incarnations.

```

1985 *package | adshtml -- style)
1986 \newcommand{\RMAA}{RevMexAA}
1987 \newcommand{\RMAAlong}{Revista Mexicana de Astronom\'\i{a} y Astrof\'\i{sica}}
1988 \newcommand{\RMAASC}{RevMexAA(SC)}
1989 \newcommand{\RMAASClong}{\RMAA\ (Serie de Conferencias)}

```

`\ibidrule` This puts a horizontal rule with a period after it. It is used when the author list of a reference is identical to the preceding one.

```

1990 \newcommand{\ibidrule}{\rule[-0.03cm]{4.7em}{.01cm}.\ }

```

`\ThisVolume` References to other articles in the same volume can be coded as, e.g., `\bibitem{} Bloggs, J. \ThisVolume`

```

1991 \newcommand{\ThisVolume}[1]{%
1992 \@year, \if@proceedings\RMAASC\else\RMAA\fi, \@volume,
1993 \if@book\oldpageref{#1:RMAAFirstPage}\else 000\fi\ (this volume)}

```

Other stuff that may be useful in ref lists.

```

1994 \newcommand{\etal}{et al.\@}

```

Various new commands from AAS macros

```

1995 \def\acknowledgments{\vskip 3ex plus .8ex minus .4ex}
1996 \let\acknowledgements=\acknowledgments % second spelling
1997 \let\jnl@style=\rm
1998 \def\ref@jnl#1{\jnl@style#1}
1999 \DeclareRobustCommand\aj{\ref@jnl{AJ}}
2000 \DeclareRobustCommand\araa{\ref@jnl{ARA\&A}}
2001 \DeclareRobustCommand\apj{\ref@jnl{ApJ}}
2002 \DeclareRobustCommand\apjl{\ref@jnl{ApJ}}
2003 \DeclareRobustCommand\apjs{\ref@jnl{ApJS}}
2004 \DeclareRobustCommand\ao{\ref@jnl{ApJ\~Opt.}}
2005 \DeclareRobustCommand\apss{\ref@jnl{Ap\&SS}}
2006 \DeclareRobustCommand\aap{\ref@jnl{A\&A}}
2007 \DeclareRobustCommand\aprp{\ref@jnl{A\&A~Rev.}}

```

```

2008 \DeclareRobustCommand\aaaps{\ref@jnl{A\&AS}}
2009 \DeclareRobustCommand\azh{\ref@jnl{AZh}}
2010 \DeclareRobustCommand\baas{\ref@jnl{BAAS}}
2011 \DeclareRobustCommand\jrasc{\ref@jnl{JRASC}}
2012 \DeclareRobustCommand\memras{\ref@jnl{MmRAS}}
2013 \DeclareRobustCommand\mnras{\ref@jnl{MNRAS}}
2014 \DeclareRobustCommand\pra{\ref@jnl{Phys.~Rev.~A}}
2015 \DeclareRobustCommand\prb{\ref@jnl{Phys.~Rev.~B}}
2016 \DeclareRobustCommand\prc{\ref@jnl{Phys.~Rev.~C}}
2017 \DeclareRobustCommand\prd{\ref@jnl{Phys.~Rev.~D}}
2018 \DeclareRobustCommand\pre{\ref@jnl{Phys.~Rev.~E}}
2019 \DeclareRobustCommand\prl{\ref@jnl{Phys.~Rev.~Lett.}}
2020 \DeclareRobustCommand\pasp{\ref@jnl{PASP}}
2021 \DeclareRobustCommand\pasj{\ref@jnl{PASJ}}
2022 \DeclareRobustCommand\qjras{\ref@jnl{QJRAS}}
2023 \DeclareRobustCommand\skytel{\ref@jnl{S\&T}}
2024 \DeclareRobustCommand\solphys{\ref@jnl{Sol.~Phys.}}
2025 \DeclareRobustCommand\sovast{\ref@jnl{Soviet~Ast.}}
2026 \DeclareRobustCommand\ssr{\ref@jnl{Space~Sci.~Rev.}}
2027 \DeclareRobustCommand\zap{\ref@jnl{ZAp}}
2028 \DeclareRobustCommand\nat{\ref@jnl{Nature}}
2029 \DeclareRobustCommand\iaucirc{\ref@jnl{IAU~Circ.}}
2030 \DeclareRobustCommand\aplett{\ref@jnl{Astrophys.~Lett.}}
2031 \DeclareRobustCommand\apspr{\ref@jnl{Astrophys.~Space~Phys.~Res.}}
2032 \DeclareRobustCommand\bain{\ref@jnl{Bull.~Astron.~Inst.~Netherlands}}
2033 \DeclareRobustCommand\fcj{\ref@jnl{Fund.~Cosmic~Phys.}}
2034 \DeclareRobustCommand\gca{\ref@jnl{Geochim.~Cosmochim.~Acta}}
2035 \DeclareRobustCommand\grl{\ref@jnl{Geophys.~Res.~Lett.}}
2036 \DeclareRobustCommand\jcp{\ref@jnl{J.~Chem.~Phys.}}
2037 \DeclareRobustCommand\jgr{\ref@jnl{J.~Geophys.~Res.}}
2038 \DeclareRobustCommand\jqsrt{\ref@jnl{J.~Quant.~Spec.~Radiat.~Transf.}}
2039 \DeclareRobustCommand\memsai{\ref@jnl{Mem.~Soc.~Astron.~Italiana}}
2040 \DeclareRobustCommand\nphysa{\ref@jnl{Nucl.~Phys.~A}}
2041 \DeclareRobustCommand\physrep{\ref@jnl{Phys.~Rep.}}
2042 \DeclareRobustCommand\physscr{\ref@jnl{Phys.~Scr}}
2043 \DeclareRobustCommand\planss{\ref@jnl{Planet.~Space~Sci.}}
2044 \DeclareRobustCommand\procspie{\ref@jnl{Proc.~SPIE}}
2045 \let\astap=\aaap
2046 \let\apjlett=\apjl
2047 \let\apjsupp=\apjs
2048 \let\applopt=\ao
2049 \def\phn{\phantom{0}}
2050 \def\phd{\phantom{.}}
2051 \def\phs{\phantom{\ensuremath{-}}}
2052 \def\phm#1{\phantom{#1}}

```

All these are redone as robust and using more modern commands where possible. The robustness is so they will not get expanded if used in abstracts and titles when these are passed to the ADS file.

```

2053 %%\def\sun{\hbox{$\odot$}}
2054 \DeclareRobustCommand\sun{\ensuremath{\odot}}
2055 %%\def\earth{\hbox{$\oplus$}}
2056 \DeclareRobustCommand\earth{\ensuremath{\oplus}}
2057 %%\def\lessssim{\mathrel{\hbox{\rlap{\hbox{\lower4pt\hbox{$\sim$}}}\hbox{$<$}}}}
2058 %%\def\gtrsim{\mathrel{\hbox{\rlap{\hbox{\lower4pt\hbox{$\sim$}}}\hbox{$>$}}}}
2059 \DeclareRobustCommand\lessssim{\mathrel{\hbox{\smaller\smaller\rlap{\hbox{\lower3pt\hbox{$\sim$}}}\hbox{$<$}}}}
2060 \DeclareRobustCommand\gtrsim{\mathrel{\hbox{\smaller\smaller\rlap{\hbox{\lower3pt\hbox{$\sim$}}}\hbox{$>$}}}}
2061 %%\def\lta{\mathrel{\spose{\lower 3pt\hbox{$\mathchar"218$}}}}
2062 %%\def\lta{\mathrel{\spose{\lower 3pt\hbox{$\mathchar"218$}}}}
2063 %%\def\lta{\mathrel{\spose{\lower 3pt\hbox{$\mathchar"218$}}}}
2064 %%\def\lta{\mathrel{\spose{\lower 3pt\hbox{$\mathchar"218$}}}}
2065 \DeclareRobustCommand\sq{\hbox{\rlap{$\sqcap$}$\sqcup$}}

```

```

2066 %%\def\arcdeg{\hbox{$^\circ$}}
2067 %%\def\arccmin{\hbox{$^\prime$}}
2068 %%\def\arcsec{\hbox{$^\prime\prime$}}
2069 \DeclareRobustCommand\arcdeg{\ensuremath{^\circ}}
2070 \DeclareRobustCommand\arccmin{\ensuremath{^\prime}}
2071 \DeclareRobustCommand\arcsec{\ensuremath{^\prime\prime}}
2072 %%\def\fd{\hbox{$.\!!\!^\circ$}}
2073 %%\def\fh{\hbox{$.\!!\!^\prime$}}
2074 %%\def\fm{\hbox{$.\!!\!^\prime\prime$}}
2075 %%\def\fs{\hbox{$.\!!\!^\circ$}}
2076 %%\def\fdg{\hbox{$.\!!\!^\circ$}}
2077 %%\def\farcm{\hbox{$.\mkern-4mu^\prime$}}
2078 %%\def\farcs{\hbox{$.\!!\!^\prime\prime$}}
2079 %%\def\fp{\hbox{$.\!!\!^\scriptscriptstyle\rm p$}}
2080 \DeclareRobustCommand\fd{\ensuremath{^\circ}}
2081 \DeclareRobustCommand\fh{\ensuremath{^\prime}}
2082 \DeclareRobustCommand\fm{\ensuremath{^\prime\prime}}
2083 \DeclareRobustCommand\fs{\ensuremath{\mkern0.5mu.\mkern-5mu^\circ}}
2084 \DeclareRobustCommand\fdg{\ensuremath{^\circ}}
2085 \DeclareRobustCommand\farcm{\ensuremath{.\mkern-4mu^\prime}}
2086 \DeclareRobustCommand\farcs{\ensuremath{\mkern1mu.\mkern-6mu^\prime\prime}}
2087 %%\DeclareRobustCommand\farcs{\ensuremath{.\!!\!^\prime\prime}}
2088 \DeclareRobustCommand\fp{\ensuremath{.\!!\!^\scriptscriptstyle\rm p}}
2089 %%\def\micron{\hbox{$\mu$}}
2090 \DeclareRobustCommand\micron{\ensuremath{\mu}}
2091 \let\la=\lessssim
2092 \let\ga=\gtrsim
2093 %%\def\case#1#2{\hbox{$\frac{\#1}{\#2}$}}
2094 %%\def\slantfrac#1#2{\hbox{$\,\!^{\#1}\!/_{\#2}$}}
2095 %%\def\onehalf{\slantfrac{1}{2}}
2096 %%\def\onethird{\slantfrac{1}{3}}
2097 %%\def\twothirds{\slantfrac{2}{3}}
2098 %%\def\onequarter{\slantfrac{1}{4}}
2099 %%\def\threequarters{\slantfrac{3}{4}}
2100 \DeclareRobustCommand\case[2]{\ensuremath{\frac{\#1}{\#2}}}
2101 \DeclareRobustCommand\slantfrac[2]{\ensuremath{\,\!^{\#1}\!/_{\#2}}}
2102 \DeclareRobustCommand\onehalf{\slantfrac{1}{2}}
2103 \DeclareRobustCommand\onethird{\slantfrac{1}{3}}
2104 \DeclareRobustCommand\twothirds{\slantfrac{2}{3}}
2105 \DeclareRobustCommand\onequarter{\slantfrac{1}{4}}
2106 \DeclareRobustCommand\threequarters{\slantfrac{3}{4}}
2107 %%\def\ubvr{\hbox{$U\!BV\!R$}}
2108 %%\def\ub{\hbox{$U\!-\!B$}}
2109 %%\def\bv{\hbox{$B\!-\!V$}}
2110 %%\def\vr{\hbox{$V\!-\!R$}}
2111 %%\def\ur{\hbox{$U\!-\!R$}}

```

New commands for “photometric” colors

```

2112 \DeclareRobustCommand\ubvr{\ensuremath{U\!BV\!R}}
2113 \DeclareRobustCommand\Color[2]{%
2114   \ensuremath{%
2115     \#1\!\!{\ifx\#1V\!\!{\fi-\!}\#2
2116   }}
2117 \DeclareRobustCommand\ub{\Color{U}{B}}
2118 \DeclareRobustCommand\bv{\Color{B}{V}}
2119 \DeclareRobustCommand\vr{\Color{V}{R}}
2120 \DeclareRobustCommand\ur{\Color{U}{R}}
2121 %% New version of the \ion command, that actually works!

```

\ion This version of the \ion command allows you to write either \ion{N}{4} or \ion{N}{iv} in order to get N IV.

```

2122 \DeclareRobustCommand\ion[2]{%

```



```

2123 \mbox{#1\kern0.2em%
2124 \smaller\rmfamily%
2125 \edef\@tempa{\@car#2\@nil}%
2126 \ifcat1\@tempa%
2127 \@Roman{#2}%
2128 \else%
2129 \uppercase{#2}%
2130 \fi}}
2131 \newcounter{IonStage}
2132 \DeclareRobustCommand\plainion[2]{\setcounter{IonStage}{#2}#1 \Roman{IonStage}}
2133 %%\def\ion#1#2{\ensuremath{\mathrm{#1}};}{\protect\small\rm\@Roman{#2}}}

2134 \DeclareRobustCommand\nodata{$\cdots$}

```

These are needed by the `\ion` command. Isn't there an easier way of doing this?

```

2135 \let\@small=\small
2136 \let\@normalsize=\normalsize
2137 \let\@footnotesize=\footnotesize
2138 \let\@scriptsize=\scriptsize
2139 \let\@tiny=\tiny
2140 \let\@large=\large
2141 \let\@Large=\Large
2142 \let\@LARGE=\LARGE
2143 \let\@huge=\huge
2144 \let\@Huge=\Huge
2145 \newcommand{\smaller}{\small}
2146 \renewcommand{\normalsize}{\renewcommand{\smaller}{\small}\@normalsize}
2147 \renewcommand{\small}{\renewcommand{\smaller}{\footnotesize}\@small}
2148 \renewcommand{\footnotesize}{\renewcommand{\smaller}{\scriptsize}\@footnotesize}
2149 \renewcommand{\scriptsize}{\renewcommand{\smaller}{\tiny}\@scriptsize}
2150 \renewcommand{\tiny}{\renewcommand{\smaller}{\tiny}\@tiny}
2151 \renewcommand{\large}{\renewcommand{\smaller}{\normalsize}\@large}
2152 \renewcommand{\Large}{\renewcommand{\smaller}{\large}\@Large}
2153 \renewcommand{\LARGE}{\renewcommand{\smaller}{\Large}\@LARGE}
2154 \renewcommand{\huge}{\renewcommand{\smaller}{\LARGE}\@huge}
2155 \renewcommand{\Huge}{\renewcommand{\smaller}{\huge}\@Huge}
2156 \</package | adshtml -- style>

```

4 Other files

4.1 The driver and make files

These are put here for completeness, although they still need to be distributed separately since otherwise the user won't be able to unpack this file into its constituent parts.

The Makefile has two principal rules: `docs`, and `macros`. The `docs` rule produces a PDF and gzipped PS file of the documentation. I still haven't perfected the combination of rules required to get it to run \LaTeX enough times in all circumstances. The `macros` rule runs \LaTeX on `rmaa.ins` in order to unpack `rmaa.cls` and all the other little files (including the Makefile and the `rmaa.ins` files themselves...

First set up lists of various types of file.

```

2157 (*makefile)
2158 DOFILES=rmaa.pdf rmaa.ps.gz
2159 MACRO_LTX_FILES=rmaa.cls rmaa.ins rmaacite.sty adshtml.sty ADS.tex
2160 SHELLSCRIPTS=makeads.sh
2161 MACRO_OTHER_FILES=adshtml.perl .latex2html-init
2162 MAKEFILE=Makefile

```

```
2163 MACROFILES=$(MACRO_LTX_FILES) $(SHELLSCRIPTS) $(MACRO_OTHER_FILES)
2164 SKELETONFILES=ADS.tex
```

Install the files read only in the parent directory (idea is that the source files are in a subdir of the installation dir).

```
2165 INSTALL=install
2166 INSTALL_DIR=..
```

The default rule is to make everything. Installation must be explicitly asked for.

```
2167 all: docs macros
2168
2169 install: install-docs install-macros
2170
```

Most files are installed read-only to prevent editing. Skeleton files must be writeable. Must be careful not to overwrite the Makefile in the parent directory.

```
2171 install-macros: macros
2172     $(INSTALL) -m 444 $(MACRO_LTX_FILES) $(MACRO_OTHER_FILES) $(INSTALL_DIR)
2173     $(INSTALL) -m 555 $(SHELLSCRIPTS) $(INSTALL_DIR)
2174     $(INSTALL) -m 644 $(SKELETONFILES) $(INSTALL_DIR)
2175
2176 install-docs: docs
2177     $(INSTALL) rmaa.pdf $(INSTALL_DIR)/rm-fulldocs.pdf
2178
```

Make the PDF and gzipped PS files.

```
2179 docs: $(DOCFILES)
2180
```

Make everything else if either the .dtx or .ins files have changed.

```
2181 macros: rmaa.dtx rmaa.ins
```

Ensure that all the macro files can be written to then recreate them. The touch is there in case any of the files don't exist yet.

```
2182     touch $(MACROFILES) $(MAKEFILE)
2183     chmod u+w $(MACROFILES) $(MAKEFILE)
2184     latex "\input{rmaa.ins}"
```

TeX automatically adds the .tex extension to extensionless files, bless it. We fix this and take the opportunity to convert back to TABs all that it has lovingly converted to spaces.

```
2185     cp -f $(MAKEFILE) $(MAKEFILE).BCK && unexpand $(MAKEFILE).tex >| $(MAKEFILE)
```

Make the shell scripts executable and everything unwriteable (so they don't get hand-edited by mistake). However, undo this for the files that the user is *supposed* to modify.

```
2186     chmod a+x $(SHELLSCRIPTS)
2187     chmod a-w $(MACROFILES) $(MAKEFILE)
2188     chmod u+w $(SKELETONFILES)
2189
```

We now use PDF_{La}TeX for this.

```
2190 rmaa.pdf: rmaa.aux rmaa.ind rmaa.gls
2191     @echo "REGENERATING .pdf FILE"
2192     pdflatex "\nonstopmode\input{rmaa.dtx}"
2193
2194 rmaa.aux: rmaa.dtx rmaa.ind rmaa.gls
2195     @echo "REGENERATING .aux FILE"
2196     pdflatex "\nonstopmode\input{rmaa.dtx}"
2197
2198 rmaa.ind: rmaa.idx
2199     @echo "REGENERATING INDEX"
```

```

2200         makeindex -s gind.ist rmaa
2201
2202 rmaa.gls: rmaa.glo
2203         @echo "REGENERATING CHANGELOG"
2204         makeindex -s gglo.ist -o rmaa.gls rmaa.glo
2205
2206 clean:
2207         rm -f rmaa.aux rmaa.dvi rmaa.ind rmaa.gls
2208 \</makefile>

```

The `rmaa.ins` file uses the `docstrip` package to split out all the files and strip off this documentation.

```

2209 \<ins>
2210 %%
2211 %% Installation batch file for the RMAA LaTeX package
2212 %%
2213 \def\batchfile{rmaa.ins}
2214 \input docstrip.tex
2215 \preamble
2216
2217 PLEASE DO NOT EDIT THIS FILE! It is generated automatically from
2218 the file rmaa.dtx using the accompanying Makefile and rmaa.ins
2219 Any hand-edited changes will be lost
2220
2221 A LaTeX document class for the RevMexAA
2222
2223 Author: William Henney (w.henney@astrosmo.unam.mx)
2224
2225 Latest version available from: http://www.astrosmo.unam.mx/rmaa
2226
2227 Copyright (C) 1999-2007 Instituto de Astronomia, UNAM, Mexico
2228
2229 This program is free software; you can redistribute it and/or
2230 modify it under the terms of the GNU General Public License
2231 as published by the Free Software Foundation; either version 2
2232 of the License, or (at your option) any later version.
2233
2234 This program is distributed in the hope that it will be useful,
2235 but WITHOUT ANY WARRANTY; without even the implied warranty of
2236 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
2237 GNU General Public License for more details.
2238
2239 You should have received a copy of the GNU General Public License
2240 along with this program; if not, write to the Free Software
2241 Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.
2242 \endpreamble

```

Clobber files without asking

```

2243 \askforoverwritefalse

```

Make the \LaTeX macro files (class and styles)

```

2244 \generate{
2245   \file{rmaa.cls}{\from{rmaa.dtx}{package}}
2246   \file{rmaa.ins}{\from{rmaa.dtx}{ins}}
2247   \file{rmaacite.sty}{\from{rmaa.dtx}{rmaacite}}
2248   \file{adshtml.sty}{\from{rmaa.dtx}{adshtml-style}}
2249   \file{ADS.tex}{\from{rmaa.dtx}{ads-container}}
2250 }

```

Make the other non- \LaTeX files. These are done separately since they can't use `'%%'` as a comment character for the preamble/postamble (and Perl files can't have the postamble I don't think).

```

2251 \generate{\nopreamble\nopostamble%
2252   \file{Makefile}{\from{rmaa.dtx}{makefile}}
2253   \file{adshtml.perl}{\from{rmaa.dtx}{adshtml-perl}}
2254   \file{makeads.sh}{\from{rmaa.dtx}{ads-shell-script}}
2255   \file{sample.latex2html-init}{\from{rmaa.dtx}{latex2html-init}}
2256 }
2257
2258 %% Local Variables:
2259 %% mode: LaTeX
2260 %% mode: Font-lock
2261 %% End:
2262 \>ins

```

4.2 Extended citation syntax

Modified from a file called mnrascite.sty I no longer remember where I stole the original version of this from

Alterations to the cite commands to make them do more sensible things. N.B. the bibliography style should produce entries which have labels where the date is delimited by angle brackets 'i' for these macros to work properly. They will not give very sensible error messages if you do not do this properly.

A new command \scite{key} is defined which produces a citation which is suitable for insertion in a sentence. i.e., it does not put brackets around the whole citation, only the date. Also \pcite{key} produce output with no parentheses whatsoever.

Should redefine \@bibitem really to have any hope of compatibility the command \lbibcite is defined to deal with the citations.

```

2263 (*rmaacite)
2264 \def\bibitem[#1<#2>]#3{\par\hangindent=1.5em\hangafter=1
2265   \if@filesw
2266     {\def\protect##1{\string ##1\space}
2267      \immediate\write\@auxout{\string\lbibcite{#3}{#1}{#2}}}
2268   \fi}
2269 \@redefinebibitem % what it says

```

Note that the \lbibcite defines two types of citation one contains the names, the other the year

```

2270 \def\lbibcite#1#2#3{\global\@namedef{b@#1}{#2}
2271   \global\@namedef{by@#1}{#3}}
2272
2273 \def\@bcite#1#2{{\#1\if@tempswa , #2\fi}}
2274 \def\@pcite#1#2{\#1\if@tempswa , #2\fi}

```

This declaration contains what is put between the name and the date

```

2275 \def\@brcite{\ ( )}
2276 \def\@ebrcite{)}
2277 \def\@fmttop#1{\@fmtcite[\csname #1\endcsname]}
2278 \def\@citex[#1]#2{%
2279 %% \if@filesw\immediate\write\@auxout{\string\citation{#2}}\fi
2280 %% WJH added 16 Jan 2002
2281   \@for\@citeb:=#2\do{%
2282     \edef\@citeb{\expandafter\@firstofone\@citeb:\articlename}%
2283     \if@filesw\immediate\write\@auxout{\string\citation{\@citeb}}\fi}%
2284 %% to here
2285   \def\@citea{}%
2286   \@cite{\@for\@citeb:=#2\do
2287     {%
2288       \edef\@citeb{\expandafter\@firstofone\@citeb:\articlename}%

```

```

2289 \citea\def\@citea{;\ } \@ifundefined
2290 {b@\@citeb}{\bf ?}\@warning {Citation '\@citeb' on page \thepage \space undefined}}%
2291 {\csname b@\@citeb\endcsname\@citebro\csname by@\@citeb\endcsname\@citebrc}}}%
2292 {\#1}}
2293
2294 \def\cite{\@ifnextchar [{\let\@citebro=\space
2295 \let\@citebrc=\relax
2296 \let\@cite=\@bcite\@tempswatrue\@citex}
2297 {\let\@citebro=\space
2298 \let\@citebrc=\relax
2299 \let\@cite=\@bcite\@tempswafalse\@citex[]}]
2300 \def\pcite{\@ifnextchar [{\let\@citebro=\space
2301 \let\@citebrc=\relax
2302 \let\@cite=\@pcite\@tempswatrue\@citex}
2303 {\let\@citebro=\space
2304 \let\@citebrc=\relax
2305 \let\@cite=\@pcite\@tempswafalse\@citex[]}]
2306 \def\scite{\@ifnextchar [{\let\@citebro=\@brcite
2307 \let\@citebrc=\@ebrcite
2308 \let\@cite=\@pcite\@tempswatrue\@citex}
2309 {\let\@citebro=\@brcite
2310 \let\@citebrc=\@ebrcite
2311 \let\@cite=\@pcite\@tempswafalse\@citex[]}]
2312
2313 \renewenvironment{thebibliography}
2314 {\section*{REFERENCES}\vspace*{\afterbiblioskip}\small
2315 \if@book\RereadBiblio\fi
2316 \sloppy\clubpenalty4000\widowpenalty4000
2317 \sfcode'\.=1000\relax
2318 \setlength\parindent{\z@}\setlength\parskip{\z@}}
2319 {\relax\normalsize\@outputaddressesifnecessary}
2320 \rmaacite)

```

4.3 Auxilliary files for generating ADS data

The ADS data are written by \LaTeX to a .ads file. This file then has to be included in the following file (ADS.tex), which is run through \LaTeX 2HTML (see below).

```

2321 (*ads – container)
2322 %%
2323 %% Instructions:
2324 %% Edit the \input{} line below to reflect the name of your file.
2325 \documentclass{article}
2326 \usepackage[latin1]{inputenc}
2327 \usepackage{adshtml}
2328 \newcommand{\ADSfield}[2]
2329 {\%#1 #2\\}
2330 %%\newcommand{\ADSvfield}[2]
2331 \%{\%#1 \begin{verbatim}#2\end{verbatim}}
2332 \newenvironment{ADSarticle}{}{\par\bigskip}
2333 \renewcommand{\bibitem}[2][\par]
2334 \setlength{\parindent}{0pt}
2335 \renewcommand{\ThisVolume}[1]{%
2336 2001, \RMAASC, 12, \pageref{#1:RMAAFirstPage}}
2337
2338
2339 \begin{document}
2340 \makeatletter
2341 \input{rmbooksamp.ads}
2342 \end{document}
2343 \ads – container)

```

This is the `adshtml.sty` style file used by `ADS.tex`. It just defines a few macros that might be used in abstracts, etc (really it should define them all). This now gets all its code from Sec 3.

```
2344 (*adshtml – style)
2345 %% Nothing else needs to go here now.
2346 \end{style}
```

The init file for `latex2html`.

```
2347 (*latex2html – init)
2348 $MAX_SPLIT_DEPTH = 0;
2349 $HTML_VERSION = "4.0,math";
2350 $NO_SIMPLE_MATH = 1;
2351 $ADDRESS = "<p><address><a href=\"mailto:rmaa@astroscu.unam.mx\">rmaa@astroscu.unam.mx</ad
2352 $INFO = "<p>This document was created using latex2html and the rmaa latex macros</p>";
2353 $NO_NAVIGATION = 1;
2354 1;
2355 \end{init}
```

This is the `adshtml.perl` file that is used by `LATEX2HTML`. Some bizarre `TEXy` command sometimes show up so we tell it to ignore these. All the astronomy macros that come from AAS are processed in `TEX`. That way they get made to images but with an `ALT` tag that has the original code, which is what will be picked up by `lynx`, with the result that they get passed intact into the final `.txt` file.

```
2356 (*adshtml – perl)
2357 package main;
2358
2359 $dum = &do_cmd_makeatletter();
2360
2361 sub do_cmd_RMAA {
2362     local($_) = @_;
2363     "RevMexAA" . $_;
2364 }
2365
2366 sub do_cmd_RMAASC {
2367     local($_) = @_;
2368     "RevMexAASC" . $_;
2369 }
2370
2371 sub do_cmd_et al {
2372     local($_) = @_;
2373     "et al\." . $_;
2374 }
2375
2376 sub do_cmd_ibidrule {
2377     local($_) = @_;
2378     "<img src=\"foo\" alt=\"\ibidrule\">" . $_;
2379 }
2380
2381
2382 sub do_cmd_bibitem {
2383     local($_) = @_;
2384     local($key);
2385     local($opt, $dummy)=&get_next_optional_argument;
2386     $key = &missing_braces unless
2387         ((s/$next_pair_pr_rx/$key = $2; ''/eo)
2388          ||(s/$next_pair_rx/$key = $2; ''/eo));
2389     "<p>" . $_;
2390 }
2391
2392 &ignore_commands (<<_RAW_ARG_CMDS_);
```

```

2393 lowercase
2394 adjustfinalcols
2395 textsuperscript # {}
2396 newline # []
2397 thinmuskip
2398 mskip
2399 smallskip
2400 medskip
2401 bigskip
2402 hspace # {}
2403 hspacestar # {}
2404 vspace # {}
2405 vspacestar # {}
2406 mathrm
2407 _at_mathrm
2408 spacefactor
2409 discretionary
2410 unhbox
2411 voidb_at_x
2412 penalty
2413 _at_M
2414 _at_m
2415 null
2416 IeC
2417 _RAW_ARG_CMDS_
2418
2419 &process_commands_in_tex (<<_RAW_ARG_CMDS_);
2420 sun
2421 earth
2422 lesssim
2423 gtrsim
2424 sq
2425 argdeg
2426 arcmin
2427 arcsec
2428 fd
2429 fh
2430 fm
2431 fs
2432 fdg
2433 farcm
2434 farcs
2435 fp
2436 micron
2437 la
2438 ga
2439 case # {} # {}
2440 slantfrac # {} # {}
2441 onehalf
2442 onethird
2443 twothirds
2444 onequarter
2445 threequarters
2446 ubvr
2447 ub
2448 bv
2449 vr
2450 ur
2451 aj
2452 araa
2453 apj
2454 apjl

```

```

2455 apjs
2456 ao
2457 apss
2458 aap
2459 aapr
2460 aaps
2461 azh
2462 baas
2463 jrasc
2464 memras
2465 mnras
2466 pra
2467 prb
2468 prc
2469 prd
2470 pre
2471 prl
2472 pasp
2473 pasj
2474 qjras
2475 skytel
2476 solphys
2477 sovast
2478 ssr
2479 zap
2480 nat
2481 iaucirc
2482 aplett
2483 apspr
2484 bain
2485 fcp
2486 gca
2487 grl
2488 jcp
2489 jgr
2490 jqsr
2491 memsai
2492 nphysa
2493 physrep
2494 physscr
2495 planss
2496 procsapie
2497 _RAW_ARG_CMDS_
2498
2499 l; # This must be the last line
2500 (/adshtml - perl)

```

This is a shell script `makeads.sh` that generates the `_ads.txt` file from `_ads.tex` by using `LATEX2HTML` and `lynx`.

```

2501 (*ads - shell - script)
2502 #! /bin/sh
2503 if [ -z $1 ]; then
2504     echo "Usage: $0 basename"
2505     exit
2506 fi
2507 BASENAME=$1
2508 ADSBASENAME=${BASENAME}_ads
2509 AUXFILE=$BASENAME.aux
2510 TMPFILE=tmp.$$
2511
2512
2513 echo "Generating $ADSBASENAME.tex"

```



```

2514
2515 # For some reason, must double-up \\ to \\\ but not \ to \\ - odd!
2516 cat > $ADSBASENAME.tex <<EOF
2517 %% PLEASE DO NOT EDIT THIS FILE! It is generated automatically from
2518 %% the script makeads.sh. Any hand-edited changes will be lost
2519 %%
2520 \documentclass{article}
2521 \usepackage[latin1]{inputenc}
2522 \usepackage{html}
2523 \usepackage{adshtml}
2524 \newcommand{\ADSfield}[2]{\%#1 #2\\}
2525 \newenvironment{ADSarticle}{}{\par\bigskip}
2526 \setlength{\parindent}{0pt}
2527 \newcounter{istage}
2528 \renewcommand{\ion}[2]{\setcounter{istage}{#2}\Roman{istage}}
2529 \begin{document}
2530 \makeatletter
2531 EOF
2532 echo >> $ADSBASENAME.tex "\input{$BASENAME.ads2}"
2533 echo >> $ADSBASENAME.tex "\end{document}"
2534
2535
2536
2537 echo "Generating $ADSBASENAME.sed"
2538
2539 # Find type of journal
2540 grep '\documentclass\[.*proceedings.*\]' $BASENAME.tex >/dev/null \
2541     && JOURNAL='RevMexAA(SC)' \
2542     || JOURNAL='RevMexAA'
2543
2544 # Find the year and volume number
2545 YEAR='grep '\SetYear' $BASENAME.tex | sed 's/.*\SetYear{\(.*\)}.*\1/'
2546 VOLUME='grep '\SetVolume' $BASENAME.tex | sed 's/.*\SetVolume{\(.*\)}.*\1/'
2547
2548 # Generate an auxilliary sed script
2549 cat > $TMPFILE <<EOF
2550 s|\\newlabel{\(.*\):RMAAFirstPage}{\{.*\}\(.*\)}|s|\\\\\\\\\\\\ThisVolume{\1}/$YEAR, RevMexAA(
2551 EOF
2552
2553 # Now go through the .aux file, looking for \newlabels and use the sed
2554 # script just generated in order to make another sed script, one that
2555 # will replace \ThisVolume{LABEL} with the correct reference
2556 grep '^\\newlabel{.*:RMAAFirstPage}' $AUXFILE \
2557     | sed -f $TMPFILE > $ADSBASENAME.sed && rm $TMPFILE
2558
2559 # Append a further sed command to get rid of \@, since redefining
2560 # it in _ads.tex didn't work
2561 echo >> $ADSBASENAME.sed 's/\@//g'
2562
2563 echo "Generating $BASENAME.ads2 from $ADSBASENAME.sed and $BASENAME.ads"
2564
2565 # Apply this to the .ads file, generating the .ads2 file, which is included
2566 # by the _ads.tex file.
2567 sed -f $ADSBASENAME.sed $BASENAME.ads > $BASENAME.ads2
2568
2569 echo "Generating $ADSBASENAME.txt from $ADSBASENAME.tex and $BASENAME.ads2"
2570
2571 # Now run latex2html on the _ads.tex file
2572 latex2html -no_navigation -info 0 -address 0 -html_version 4.0,math $ADSBASENAME
2573
2574 # Then, convert to plaintext with lynx and tidy it up a bit
2575 lynx --justify=off --width=100 --dump --nolist \

```

```

2576      $ADSBASENAME/$ADSBASENAME.html | cut -c4- \
2577      | sed 's/ibidrule/\\ibidrule/g' > $ADSBASENAME.txt
2578 (/ads - shell - script)

```

5 Epilogue

Err, that's it ...

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Change History

0.0	General: So bored today, decided to rewrite RMAA LaTeX macros from scratch	2	1.6	General: More cleaning up: full stops after titles in index, running headers and footers in frontmatter, fontsize in title of index, etc	2
0.1	General: Just about working - still missing Fig/Tab/Refs	2	1.7	General: Fixed more little things. Page labels now work, even if you have no bibliography. You can output the full addresses by hand with the <code>\outputfulladdresses</code> command. Editors' Guide updated but still not finished. Revamped <code>splitbook.sh</code> now produces PS file of each article for web page and also an EPS file of each page for sending to the printers.	2
0.2	General: All basic functionality present, I think	2	1.8	General: Fixed bug in last page label with <code>\suppressfulladdresses</code>	2
0.3	General: Better mechanism for alternative affiliations Added 'guide' option for user guide . . .	2	1.9	General: Corrected position of page number in footer of articles that open on even pages. Ensured that first article in each session opens on an odd page, as do list of abstracts and author index. Added extra space in TOC before the backmatter. Added command for editors, <code>\BoldSessionTitles</code> , that makes produces bold titles for session in the TOC.	2
0.4	General: Minor stylistic changes . . .	2	2.0	General: Added 'newstyle' option, which should be used in all new proceedings volumes (wider abstract, smaller typeface in fig captions, etc.) Added commands for formatting table captions. New demonstration document <code>rmpostsamp.tex</code> for 1-page posters. This will be the last release under a PRI government (for a while...)	2
0.5	General: Added <code>\fulladdresses</code> and <code>\adjustfinalcols</code> (just about working)	2	2.1	General: Fixed some inconsisten-	
0.6	General: Tweaked <code>\adjustfinalcols</code> (still not perfect) Added proceedings option Added onecolumn/twocolumn options (orthogonal to journal/proceedings)	2			
0.7	General: Increased spacing between sections in single column styles. Suppressed floats at bottom of pages (didn't work though)	2			
1.0	General: Now does a whole book - lots of stuff tidied up	2			
1.1	General: Added manuscript option, corrected bugs	2			
1.2	General: Added <code>\plate</code> command . . .	2			
1.3	General: Corrected <code>\figcaption</code> to do the caption formatting right Corrected font size of section headings in front matter	2			
1.4	General: Added copyright and license info (GPL)	2			
1.5	General: Eliminated superscripts from titles in TOC and index . . .	2			

cies in \nocite and \bibitem unification Fixed the defini- tion of \ion so it will work in math mode and in contexts where the typesize is differ- ent from normal (e.g., title, fig captions). Modified the def- inition of \@caption, so we don't write any list-of-figures data (we never use it anyway, and it just causes problems with fragile commands in fig cap- tions).	2	3.07 General: Added proof option	2
2.2beta		3.08 \indexauthor: Remerged changes from 3.06 that got dropped from 3.07 after a syn- chronization disaster. Basically, the accentless optional argu- ment to \indexauthor. Must add the macro directories to my unison set-up to stop this sort of thing from happening.	17
General: Fixed bug whereby twocolumn option was not passed through to book class. Finally sorted out the "label on last page" issue.	2	3.09 General: Explicitly require a recent version of natbib, so that we get a decent error message if the package is too old.	4
2.2beta10		3.10 General: Set large values for \hbadness, \vbadness, \hfuzz, \vfuzz. To reduce amount of stuff that gets writ- ten to the terminal every time you compile something.	10
2.2beta11		3.11 General: Moved the \articlename to after the key for consistency with the new natbib stuff.	52
General: Just about finished all the ADS stuff now. Except for the references, which I have given up on for the time being.	19	3.12 General: Added option to have title page for each session. Turn it on with \SessionTitlePages.	37
Made twocol and newstyle the default for proceedings.	3	3.14 General: Option to turn off natbib	2
2.2beta12		rmaabib: Reinstalled old defini- tion of \bibitem for the case where the nonatbib option is re- quested, so that the rmaacite package will work. This means that you can't use rmaacite and natbib in the same volume.	33
\@keywordheader:\addkeyword New user interface for key- words.	13	3.16 \@kwtwidth: Added extra vertical space between authors and ac- cepted date.	26
2.2beta13		General: Added \Color command for doing photometric colors.	47
\@keywordheader:\addkeyword Improved behaviour with .ads file. Use \ADS@sanitize to change definitions of ' ' and \ion.	13	3.17 General: Added appendices envi- ronment that does the right thing.	29
3.05		3.18 General: trying out doctex mode	2
General: Added natbib option	2		
If the natbib option is used, then set things up so that natbib's version of the bibliography is identical to the standard one.	4		
thebibliography: Removed the \beforebibliskip and \afterbibliskip com- mands, since they cause un- wanted vertical space in some instances.	32		
3.06			
General: Natbib option turned on permanently	2		

3.19	General: Changes for Silvia - remove addresses from end, new abstract style	2	Now allow Bibtex to work properly	4
3.21	General: Changes for Silvia - abstracts are now shipped out to ADS.	2	\MSextramargin: Reduce baselinestretch in manuscript style to 1.2. No longer use raggedright for manuscript. . . .	9
3.22	General: Allow proceedings articles to have received/accepted dates	2	3.24	
3.23	\@keywordheader: \addkeyword now signals a compilation error if the author tries to add more than 6 keywords.	13	\@keywordheader: kwd-counter is now reset in \@begofarticlehook to prevent error in book style	13
	General: Full addresses are now automatically suppressed for proceedings style.	3	General: Added user access to the macro version and date via \rmVersion and \rmDate . . .	2
	Manuscript is now 10 pt instead of 12pt	3	New option boldkeywords that does the keywords in the old ugly way. Now off by default. . .	3
	Manuscript is now on by default.	2	\MSextramargin: Further reduction of baselinestretch in manuscript style to 1.1 since we now have wider margins. . .	9
			Split manuscript's extra margin into separate horizontal and vertical parts.	9