The ejpecp class*†

K. Burdzy D. Chafaï

August 17, 2021

1 Introduction

The *ejpecp* LaTeX 2$_\varepsilon$ class is designed for the typesetting of articles for the mathematical research periodicals Electronic Journal or Probability (EJP) and Electronic Communications in Probability (ECP).

2 Usage

This class works only with the pdflatex engine. See the sample file for its usage.

3 Implementation

```
%% We declare and handle our class options
\DeclareOption{EJP}{%
  \newcommand{\@EJP}{}
  \newcommand{\@JOURNAL}{EJP}
  \newcommand{\@JOURNALA}{Electron. J. Probab.}
  \newcommand{\@JOURNALL}{Electronic Journal of Probability}
  \newcommand{\@ISSN}{1083-6489}
  \newcommand{\@URL}{www.imstat.org/ejp}
  \newcommand{\@FULLURL}{https://imstat.org/journals-and-publications/electronic-journal-of-probability/}
  }
\DeclareOption{ECP}{%
  \newcommand{\@ECP}{}
  \newcommand{\@JOURNAL}{ECP}
  \newcommand{\@JOURNALA}{Electron. Commun. Probab.}
  \newcommand{\@JOURNALL}{Electronic Communications in Probability}
  \newcommand{\@ISSN}{1083-589X}
  \newcommand{\@URL}{www.imstat.org/ecp}
  \newcommand{\@FULLURL}{https://imstat.org/journals-and-publications/electronic-communications-in-probabilit
  }
\DeclareOption{NOAMS}{% prevents the load of AMS packages
  \newcommand{\@NOAMS}{}
  }
\DeclareOption{NODS}{% asks to avoid renaming \mathbb into \mathds
  \newcommand{\@NODS}{}
  }
\DeclareOption{PSTRICKS}{% pstricks and pspicture.
  % File must be compiled with "latex --shell-escape", then use dvipdf
  \newcommand{\@PSTRICKS}{}
  }
\DeclareOption{draft}{%
  \PassOptionsToClass{draft}{article}
  }
\DeclareOption{final}{%
  \PassOptionsToClass{final}{article}
```

*class for EJP and ECP journals v1.11.1 dated 2021/08/17.

†Current maintainer of class file is VTeX, Lithuania. Please send all queries to `latex-support@vtex.lt`.

```
  }
\newif\if@ejpecp@preprint \@ejpecp@preprintfalse
\DeclareOption{preprint}{\@ejpecp@preprinttrue}
\DeclareOption*{%
  \PackageWarning{ejpecp}{Unknown option `\CurrentOption'}%
  }
%\ExecuteOptions{EJP}
\ProcessOptions\relax
%% We use the standard article class
\LoadClass[a4paper,10pt,twoside]{article}
%% Packages and their options
\RequirePackage{graphicx}
\ifx\@PSTRICKS\undefined
  \DeclareGraphicsExtensions{.pdf,.PDF,.eps,.EPS,.png,.PNG,.jpg,.JPG,.jpeg,.JPEG}
\else
  \RequirePackage[pdf]{pstricks}
  \RequirePackage{auto-pst-pdf}
\fi
\RequirePackage{mathtools}
\RequirePackage{microtype}
\RequirePackage{latexsym}
\ifx\@NODS\undefined
  \RequirePackage{dsfont}
\fi
\ifx\@NOAMS\undefined
  \RequirePackage{amsmath,amsfonts,amssymb,amsthm}
\fi
\RequirePackage{geometry}
\geometry{a4paper,portrait,left=3.5cm,right=3.5cm,top=3.5cm,bottom=3.5cm}
%\RequirePackage{charter} % Ph. Carmona
\RequirePackage{bera} % beware that the logo is sensitive to default font change
\RequirePackage{hyperref}
\hypersetup{
  pagebackref=false,
  pdfborder={0 0 0},
  pdfstartview={FitH},
  hypertexnames=false,
  breaklinks,
}
\def\UrlFont{}
%%%% Macros et Environments
%% General macros
\newcommand{\@TITLE}{FIXME!}
\newcommand{\@SHORTTITLE}{FIXME!}
\newcommand{\@KEYWORDS}{FIXME!}
\newcommand{\@AMSSUBJ}{FIXME!}
\newcommand{\@ABSTRACT}{FIXME!}
\newcommand{\@VOLUME}{0}
\newcommand{\@PAPERNUM}{0}
\newcommand{\@YEAR}{2012}
\newcommand{\@PAGESTART}{1}
\newcommand{\@PAGEEND}{\@ifundefined{ejpecp@lastpage}{\@PAGESTART}{\ejpecp@lastpage}}
\newcommand{\@SUBMITTED}{FIXME!}
\newcommand{\@ACCEPTED}{FIXME!}
\newcommand{\TITLE}[1]{\renewcommand{\@TITLE}{#1}}
\newcommand{\SHORTTITLE}[1]{\renewcommand{\@SHORTTITLE}{#1}}
\newcommand{\DEDICATORY}[1]{\gdef\@DEDICATORY{#1}}
\newcommand{\AUTHORS}[1]{\author{#1}}
\let\FIRSTNAMES\@firstofone
\let\SURNAME\@firstofone
\newcommand{\KEYWORDS}[1]{\renewcommand{\@KEYWORDS}{#1}}
\newcommand{\AMSSUBJ}[1]{\renewcommand{\@AMSSUBJ}{#1}}
\newcommand{\AMSSUBJSECONDARY}[1]{\gdef\@AMSSUBJSECONDARY{#1}}
```

```
\newcommand{\ABSTRACT}[1]{\renewcommand{\@ABSTRACT}{#1}}
\newcommand{\VOLUME}[1]{\renewcommand{\@VOLUME}{#1}}
\newcommand{\PAPERNUM}[1]{\renewcommand{\@PAPERNUM}{#1}}
\newcommand{\YEAR}[1]{\renewcommand{\@YEAR}{#1}}
\newcommand{\PAGESTART}[1]{\renewcommand{\@PAGESTART}{#1}}
\newcommand{\PAGEEND}[1]{%
    \let\write@ejpecp@lastpage\relax
    \renewcommand{\@PAGEEND}{#1}%
    }
\newcommand{\SUBMITTED}[1]{\renewcommand{\@SUBMITTED}{#1}}
\newcommand{\ACCEPTED}[1]{\renewcommand{\@ACCEPTED}{#1}}
\newcommand{\DOI}[1]{\gdef\@DOI{#1}}
\newcommand{\ARXIVID}[1]{\gdef\@ARXIVID{#1}}
\newcommand{\HALID}[1]{\gdef\@HALID{#1}}
\newcommand{\ACKNO}[1]{\noindent\textbf{Acknowledgments.} #1}
\def\acknowledgementsname{Acknowledgments}
\newenvironment{acks}[1][\acknowledgementsname]{\noindent\textbf{#1.}\space\ignorespaces}{\par}
\def\EMAIL#1{E-mail:~\texttt{\href{mailto:#1}{\nolinkurl{#1}}}}
\newcommand{\BEMAIL}[1]{\newline\hspace*{1.8em}\EMAIL{#1}} % useful in ftnotes
%% Logos
\newcommand{\@EJPLOGO}{% designed by KB.
  % This version is for bera 10pt (depends on the font via "em" and "ex")
  \centerline{%
    \hbox{%
      \vrule  height -0.4 pt depth 0.8 pt width 27.7 em\space
      \kern   -27.8 em\space
      \raise   0.03ex  \hbox {\bf  E}\space
      \raise   0.06ex \hbox {l}\space
      \raise  .13ex \hbox {e}\space
      \raise  .24ex \hbox {c}\space
      \raise  .45ex \hbox {t}\space
      \raise  .78ex \hbox {r}\space
      \raise  1.31ex \hbox {o}\space
      \raise  2.08ex \hbox {n}\space
      \raise  3.14ex \hbox {i}\space
      \raise  4.53ex \hbox {c}\space
      \kern    1em\space
      \raise  8.15ex \hbox {\bf  J}\space
      \raise  10.15ex \hbox {o}\space
      \raise  12.04ex \hbox {u}\space
      \raise  13.60ex \hbox {r}\space
      \raise  14.64ex \hbox {n}\space
      \kern  .3 em\space
      \vrule  depth 0.8pt height 14.5ex \space
      \kern  -.3em\space
      \raise  15ex \hbox {a}\space
      \raise  14.64ex \hbox {l}\space
      \kern    1em\space
      \raise  12.04ex \hbox {o}\space
      \raise  10.15ex \hbox {f}\space
      \kern    1em\space
      \raise  6.23ex \hbox {\bf  P}\space
      \raise  4.53ex \hbox {r}\space
      \raise  3.14ex \hbox {o}\space
      \raise  2.08ex \hbox {b}\space
      \raise  1.31ex \hbox {a}\space
      \raise  .78ex \hbox {b}\space
      \raise  .45ex \hbox {i}\space
      \raise  .24ex \hbox {l}\space
      \raise  .13ex \hbox {i}\space
      \raise  .06ex \hbox {t}\space
      \raise  .03ex \hbox {y}%
      }%
```

```
    }%
  }%EJPLOGO
\newcommand{\@ECPLOGO}{% designed when Ren\'e Carmona was in charge of ECP
  \raisebox{0.3cm}{\parbox[t]{1.3in}{\noindent\rule{1.3in}{1.6pt}\\
      \textbf{ ELECTRONIC}\\
      \textbf{ COMMUNICATIONS}\\
      \textbf{ in PROBABILITY}\\
      \rule[.08in]{1.3in}{1.6pt}}}%
  }%ECPLOGO
\def\@doiprefix{https://doi.org/}
\def\printdoi{\texttt{\href{\@doiprefix\@DOI}{\@doiprefix\@DOI}}}
\def\msc@url{https://ams.org/mathscinet/msc/msc2020.html}
%% for multiple thanks/support in title
\def\title@makefnmark{%
    \setbox\@tempboxa\hbox{\@textsuperscript{\normalfont\@thefnmark}}%
    \@ifundefined{prev@makefnmark@wd}%
        {\edef\prev@makefnmark@wd{0pt}}%
        {\edef\prev@makefnmark@wd{\the\dimexpr\prev@makefnmark@wd+\wd\@tempboxa\relax}}%
    \rlap{\hskip\prev@makefnmark@wd\unhbox\@tempboxa}%
    }
\def\title@thanks#1{\unskip\unkern\orig@thanks{#1}\ignorespaces}%
%% make title long
\renewcommand\title[1]{\gdef\@title{#1}}
%% Macro handling the first page
\def\papernum@name{no.}
\newcommand{\FIRSTPAGE}{%
  \setcounter{page}{\@PAGESTART}%
  \title{\small
    \let\orig@thanks\thanks
    \ifx\@EJP\undefined\else
      \if@ejpecp@preprint
        \phantom{\@EJPLOGO}\par
      \else
        \@EJPLOGO
      \fi
      \bigskip
      \if@ejpecp@preprint
        \null\null
      \else
        \centerline{\@JOURNALA\ \textbf{\@VOLUME} (\@YEAR),\
          \papernum@name\ \@PAPERNUM, \,\@PAGESTART--\@PAGEEND.}%
        \centerline{ISSN:\ \texttt{\href{\@FULLURL}{\@ISSN}} %
          \ifx\@DOI\undefined\else
            \ \printdoi
          \fi}%
      \fi
      \bigskip
      \bigskip
      \bgroup
        \@ifundefined{no@title@thanks@support}{%
            \let\thanks\title@thanks
            \let\@makefnmark\title@makefnmark
            \let\support\thanks
          }{}%
        \Large\bfseries\@TITLE\par
      \egroup
    \fi
    \ifx\@ECP\undefined
    \else
      \parbox[t]{9cm}{%
        \if@ejpecp@preprint
        \else
          \@JOURNALA\ \textbf{\@VOLUME} (\@YEAR),
```

```
        \papernum@name\ \@PAPERNUM, \@PAGESTART--\@PAGEEND.\\
        \ifx\@DOI\undefined
        \else
          \ \printdoi
        \fi \\
        ISSN:\ \texttt{\href{\@FULLURL}{\@ISSN}}%
      \fi
      }%
    \hfill
    \if@ejpecp@preprint
      \phantom{\@ECPLOGO}%
    \else
      \@ECPLOGO
    \fi\\
    \bigskip
    \bigskip
    \bgroup
      \@ifundefined{no@title@thanks@support}{%
          \let\thanks\title@thanks
          \let\@makefnmark\title@makefnmark
          \let\support\thanks
        }{}%
      \Large\@TITLE\par
    \egroup
  \fi
  }% end title
\date{%
  \ifx\@DEDICATORY\undefined
  \else
    \noindent
    \emph{\small\sffamily\@DEDICATORY}%
  \fi}%
\maketitle\thispagestyle{empty}%
\begin{abstract}%
  \noindent
  \@ABSTRACT\par\vskip 1em\relax
  {\footnotesize
    \noindent\textbf{Keywords: }\@KEYWORDS.\par
    \noindent\href\msc@url{\textbf{MSC2020 subject classifications: }}%
    \ifx\@AMSSUBJSECONDARY\undefined
      \noindent
      \@AMSSUBJ.\par
    \else
      \noindent
      Primary \@AMSSUBJ, Secondary \@AMSSUBJSECONDARY.\par
    \fi
    \if@ejpecp@preprint
      \mbox{}\par
    \else
      \noindent
      Submitted to \@JOURNAL\ on \@SUBMITTED,
      final version accepted on \@ACCEPTED.\par
    \fi
    \ifx\@ARXIVID\undefined
    \else
      \noindent
      Supersedes
      \texttt{\href{https://arXiv.org/abs/\@ARXIVID}{arXiv:\@ARXIVID}}.%
    \fi\par
    \ifx\@HALID\undefined
    \else
      \noindent
      Supersedes
```

```
        \texttt{\href{https://hal.archives-ouvertes.fr/\@HALID}{HAL:\@HALID}}.%
      \fi\par
    }%footnotesize
  \end{abstract}

  \smallskip

  }%END-FIRSTPAGE
%% Macro setting the PDF title
\newcommand{\PDFFIELDS}{%
  \if@ejpecp@preprint
  \else
    \hypersetup{%
      pdftitle={\@JOURNALA\ \@VOLUME\ (\@YEAR), \papernum@name\ \@PAPERNUM, \@doiprefix\@DOI}}%
    \hypersetup{pdfproducer={\@JOURNAL\ Managing Editor https://\@URL}}%
    \hypersetup{pdfauthor={Please see \@doiprefix\@DOI}}%
  \fi
  \hypersetup{pdfkeywords={\@KEYWORDS}}%
  \hypersetup{pdfcreator={LaTeX with ejpecp.cls \@nameuse{ver@ejpecp.cls}}}%
  \hypersetup{pdfsubject={Probability Theory}}%
  }%END-PDFFIELDS

%% Supplement
\def\supplement@name{Supplementary Material}
\def\stitle#1{\def\@stitle{#1}}
\def\stitle@fmt#1{\textbf{#1.}\ }
\def\sdescription#1{\def\@sdescription{#1}}
\def\suppsection@fmt{\section*{\supplement@name}}
\long\def\supplement{\@ifnextchar[{\@supplement}{\@supplement[]}}
\long\def\@supplement[#1]{%
    \suppsection@fmt
    \global\let\suppsection@fmt\smallskip
    }
\def\endsupplement{%
    \@ifundefined{@stitle}%
        {}%
        {\stitle@fmt{\@stitle}}%
    %
    \@ifundefined{@sdescription}{}{\@sdescription}%
    \par
    }

%% Bibliography
\def\@MRExtract#1 #2!{#1}     % thanks, Martin!
\newcommand{\MR}[1]{% we need to strip the "(...)"
  \xdef\@MRSTRIP{\@MRExtract#1 !}%
  \href{https://mathscinet.ams.org/mathscinet-getitem?mr=\@MRSTRIP}{MR-\@MRSTRIP}}
\newcommand{\ARXIV}[1]{\href{https://arXiv.org/abs/#1}{arXiv:#1}}
\def\bibliography@size{\small}
\renewenvironment{thebibliography}[1]
  {%
    \section*{\refname
      \@mkboth{\MakeUppercase\refname}{\MakeUppercase\refname}}%
    \phantomsection
    \addcontentsline{toc}{section}{\refname}%
    \list{\@biblabel{\@arabic\c@enumiv}}%
    {\settowidth\labelwidth{\@biblabel{#1}}%
      \bibliography@size
      \setlength{\labelsep}{0.4em}%
      \setlength{\leftmargin}{\labelwidth}%
      \addtolength{\leftmargin}{\labelsep}%
      \setlength{\itemsep}{-.25em}%
      \@openbib@code
```

```
      \usecounter{enumiv}%
      \let\p@enumiv\@empty
      \renewcommand\theenumiv{\@arabic\c@enumiv}}%
    \sloppy\clubpenalty4000\@clubpenalty\clubpenalty\widowpenalty4000%
    \sfcode`\.\@m
  }{%
    \def\@noitemerr{%
      \@latex@warning{Empty `thebibliography' environment}}%
    \endlist
   }
%% Theorem styles
\ifx\@NOAMS\undefined
  \newtheoremstyle{ejpecpbodyit}% name % cf. thmtest.tex of AMSLaTeX
      {3pt}                     % Space above
      {3pt}                     % Space below
      {\itshape}                % Body font
      {}                        % Indent amount (empty = no indent,
                                %        \parindent = para indent)
      {\bfseries\sffamily}      % Thm head font
      {.}                       % Punctuation after thm head
      { }                       % Space after thm head: " " = normal interword space;
                                %                       \newline = linebreak
      {}                        % Thm head spec (can be left empty, meaning `normal')
      \newtheoremstyle{ejpecpbodyrm}% name % cf. thmtest.tex of AMSLaTeX
      {3pt}                     % Space above
      {3pt}                     % Space below
      {}                        % Body font
      {}                        % Indent amount (empty = no indent,
                                %        \parindent = para indent)
      {\bfseries\sffamily}      % Thm head font
      {.}                       % Punctuation after thm head
      { }                       % Space after thm head: " " = normal interword space;
                                %                       \newline = linebreak
      {}                        % Thm head spec (can be left empty, meaning `normal')
\fi
%%
\ifx\@NOAMS\undefined
  \theoremstyle{ejpecpbodyit}
\fi
\newtheorem{theorem}{Theorem}[section]
\newtheorem{assumptions}[theorem]{Assumptions}
\newtheorem{assumption}[theorem]{Assumption}
\newtheorem{claim}[theorem]{Claim}
\newtheorem{condition}[theorem]{Condition}
\newtheorem{conjecture}[theorem]{Conjecture}
\newtheorem{corollary}[theorem]{Corollary}
\newtheorem{definitions}[theorem]{Definitions}
\newtheorem{definition}[theorem]{Definition}
\newtheorem{facts}[theorem]{Facts}
\newtheorem{fact}[theorem]{Fact}
\newtheorem{heuristics}[theorem]{Heuristics}
\newtheorem{hypothesis}[theorem]{Hypothesis}
\newtheorem{hypotheses}[theorem]{Hypotheses}
\newtheorem{lemma}[theorem]{Lemma}
\newtheorem{notations}[theorem]{Notations}
\newtheorem{notation}[theorem]{Notation}
\newtheorem{proposition}[theorem]{Proposition}
\ifx\@NOAMS\undefined
  \theoremstyle{ejpecpbodyrm}
\fi
\newtheorem{example}[theorem]{Example}
\newtheorem{exercise}[theorem]{Exercise}
\newtheorem{problem}[theorem]{Problem}
```

```
\newtheorem{question}[theorem]{Question}
\newtheorem{remark}[theorem]{Remark}
%% Numbering
\ifx\@NOAMS\undefined
  \numberwithin{equation}{section}
\fi
%% Itemize and enumerate for bera
\newcommand{\@reduceitemsep}{\addtolength{\itemsep}{-0.5\baselineskip}}
\let\OLD@itemize\itemize
\renewcommand\itemize{\OLD@itemize\@reduceitemsep}
\let\OLD@enumerate\enumerate
\renewcommand\enumerate{\OLD@enumerate\@reduceitemsep}
%% Replace \mathbb by \mathds except if we require the contrary
\ifx\@NODS\undefined
  \let\realmathbb=\mathbb
  \let\mathbb=\mathds
\fi
%% Headings
\def\write@ejpecp@lastpage{\immediate\write\@auxout{\string\xdef\string\ejpecp@lastpage{\the\c@page}}}
\newcommand{\@HBLOB}{%
  \href{\@doiprefix\@DOI}%
    {\@JOURNAL\ \textbf{\@VOLUME}\, (\@YEAR),\ paper \@PAPERNUM.}}
\renewcommand{\@evenfoot}{%
  \normalfont\footnotesize\if@ejpecp@preprint\mbox{}\else\@HBLOB\fi\hfil
  \small
  \write@ejpecp@lastpage
  \raisebox{-1em}{Page \thepage/\@PAGEEND}\hfil
  \footnotesize\if@ejpecp@preprint\mbox{}\else\href{\@FULLURL}{https://\@URL}\fi}
\renewcommand{\@oddfoot}{\@evenfoot}
\renewcommand{\@evenhead}{\hfil\@SHORTTITLE\hfil}
\renewcommand{\@oddhead}{\@evenhead}
%% smaller sections titles
\renewcommand{\section}{%
  \@startsection
      {section}
      {1}
      {0em}
      {\baselineskip}
      {0.5\baselineskip}
      {\normalfont\large\bfseries}}
\renewcommand{\subsection}{%
  \@startsection
      {subsection}
      {2}
      {0em}
      {\baselineskip}
      {0.25\baselineskip}
      {\normalfont\bfseries}}
\RequirePackage{afterpackage}
\AfterPackage{natbib}
{%
  \def\bibcleanup{\vskip-\lastskip\vskip10\p@}%
  \renewcommand{\bibfont}{\small}%
  \newlength{\standard@parsep}%
  \newlength{\standard@itemsep}%
  \setlength{\standard@parsep}{4.0pt plus 2.0pt minus 1.0pt}%
  \setlength{\standard@itemsep}{-2.02498pt}%
  \setlength{\bibsep}{\standard@parsep}%
  \addtolength{\bibsep}{\standard@itemsep}%
  \renewcommand\NAT@bibsetnum[1]%
  {%
    \settowidth\labelwidth{\@biblabel{#1}}%
    \setlength{\leftmargin}{\labelwidth}\addtolength{\leftmargin}{\labelsep}%
```

```
476     \setlength{\labelsep}{3pt}%
477     \setlength{\itemsep}{\bibsep}\setlength{\parsep}{\z@}%
478     \ifNAT@openbib
479     \addtolength{\leftmargin}{\bibindent}%
480     \setlength{\itemindent}{-\bibindent}%
481     \setlength{\listparindent}{\itemindent}%
482     \setlength{\parsep}{0pt}%
483     \fi
484   }%
485 }%
486 \def\amp{&}%
487 \InputIfFileExists{ejpecp.cfg}
488     {}
489     {\def\papernum@name{article no.}}
490 %% Macros
491 \AtBeginDocument{\FIRSTPAGE\PDFFIELDS}
492 \AtEndDocument{\vfill}
493 \endinput
494 %%
495 %% End of file `ejpecp.cls'.
496 %% Macros
497 \AtBeginDocument{\FIRSTPAGE\PDFFIELDS}
498 \AtEndDocument{\vfill}
```

Change History

v0.5
General: Initial version. 1
v0.57
General: Improvements, see the README file. 1
v0.577
General: Improvements, see the README file. 1
v0.5772
General: Improvements, see the README file. 1
v0.57721
General: Improvements, see the README file. 1
v0.577215
General: Improvements, see the README file. 1
v1.0
General: First stable version, see the README file. 1
v1.1
General: Corrected stable version, see the README file. 1
v1.10.0
General: acks and support 1
v1.11.0
General: preprint option 1
v1.11.1
General: removed dependency on lastpage package 1
v1.2
General: Transition to EJMS/VTEX/ProjectEuclid. 1
v1.3
General: Updated journal URLs and DOI output format 1
v1.4
General: Abstract baselineskip correction 1
v1.5
General: false configuration for hyperref package 1
v1.6
General: full url doi, package maintaining and shorttitle info 1
v1.7
General: merged with production version: fixltx2e removed, natbib setup with afterpackage, etc 1
v1.8.2
General: no. prefix updated and msc2020 1
v1.8.3
General: Update URLs 1
v1.9.0
General: Supplement environment 1

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols

\' 163
\, ... 201, 434
\. 354
\@ABSTRACT 81, 98, 259
\@ACCEPTED 88, 108, 275
\@AMSSUBJ 80, 96, 265, 268
\@AMSSUBJSECONDARY 97, 263, 268
\@ARXIVID 110, 277, 281

\@DEDICATORY 91, 251, 254
\@DOI 109, 171, 203, 225, 300, 302, 433
\@ECP 12, 218
\@ECPLOGO 163, 234, 236
\@EJP 3, 190
\@EJPLOGO 118, 192, 194
\@FULLURL . . 9, 18, 202, 229, 440
\@HALID 111, 283, 287
\@HBLOB 432, 436
\@ISSN 7, 16, 202, 229
\@JOURNAL . . 4, 13, 274, 301, 434
\@JOURNALA . 5, 14, 200, 223, 300
\@JOURNALL 6, 15
\@KEYWORDS 79, 95, 261, 304
\@MRExtract 330, 332
\@MRSTRIP 332, 333
\@NOAMS 21, 59, 361, 386, 407, 416
\@NODS 24, 56, 426
\@PAGEEND 86, 105, 201, 224, 439
\@PAGESTART 85, 86, 102, 187, 201, 224
\@PAPERNUM 83, 100, 201, 224, 300, 434
\@PSTRICKS 28, 47
\@SHORTTITLE 78, 90, 442
\@SUBMITTED 87, 107, 274
\@TITLE 77, 89, 215, 246
\@URL 8, 17, 301, 440
\@VOLUME 82, 99, 200, 223, 300, 434
\@YEAR 84, 101, 200, 223, 300, 434
\@arabic 342, 352
\@auxout 431
\@biblabel 342, 343, 474
\@clubpenalty 353
\@doiprefix 170, 171, 300, 302, 433
\@ejpecp@preprintfalse . . . 36
\@ejpecp@preprinttrue 37
\@empty 351
\@evenfoot 435, 441
\@evenhead 442, 443
\@firstofone 93, 94
\@ifnextchar 315
\@ifundefined 86, 176, 210, 241, 321, 325
\@latex@warning 357
\@m 354
\@makefnmark 212, 243
\@mkboth 339
\@nameuse 305
\@noitemerr 356
\@oddfoot 441
\@oddhead 443
\@openbib@code 349
\@reduceitemsep . . 420, 422, 424
\@sdescription 313, 325
\@startsection 446, 454
\@stitle 311, 323
\@supplement 315, 316
\@tempboxa 175, 178, 179
\@textsuperscript 175
\@thefnmark 175
\@title 183
\\ 164–167, 224, 228, 237
\␣ 200–202, 204, 223, 224, 227, 229, 274, 300, 301, 312, 434

A

\ABSTRACT 98
\ACCEPTED 108
\ACKNO 112
\acknowledgementsname 113, 114
\addcontentsline 341
\addtolength 347, 420, 471, 475, 479
\AfterPackage 462
\amp 486
\AMSSUBJ 96
\AMSSUBJSECONDARY 97
\ARXIV 334
\ARXIVID 110
\AtBeginDocument 491, 497
\AtEndDocument 492, 498
\author 92
\AUTHORS 92

B

\baselineskip 420, 450, 451, 458, 459
\begin 257
\BEMAIL 116
\bf 124, 135, 149
\bfseries 215, 368, 379, 452, 460
\bgroup 209, 240
\bibcleanup 464
\bibfont 465
\bibindent 479, 480
\bibliography@size . . . 335, 344
\bibsep 470, 471, 477
\bigskip . 196, 207, 208, 238, 239

C

\c@enumiv 342, 352
\c@page 431
\centerline 120, 200, 202
\clubpenalty 353
\CurrentOption 39

D

\date 250
\DeclareGraphicsExtensions 48
\DeclareOption 2, 11, 20, 23, 26, 30, 33, 37, 38
\DEDICATORY 91
\def 74, 113, 115, 170–172, 174, 181, 185, 310–316, 320, 330, 335, 356, 431, 464, 486, 489
\dimexpr 178
\DOI 109

E

\edef 177, 178
\egroup 216, 247
\ejpecp@lastpage 86, 431
\else 49, 190, 193, 199, 203, 219, 222, 226, 235, 252, 266, 272, 278, 284, 298, 436, 440
\EMAIL 115, 116
\emph 254
\end 290
\endinput 493
\endlist 358
\endsupplement 320
\enumerate 423, 424
\ExecuteOptions 41

F

\fi 52, 58, 61, 195, 205, 206, 217, 228, 230, 237, 248, 255, 269, 276, 282, 288, 303, 384, 388, 409, 418, 429, 436, 440, 483
\FIRSTNAMES 93
\FIRSTPAGE 186, 491, 497
\footnotesize 260, 436, 440

G

\gdef 91, 97, 109–111, 183
\geometry 63
\global 318

H

\HALID 111
\hbox 121, 124–133, 135–139, 143, 144, 146, 147, 149–159, 175
\hfil 436, 439, 442
\hfill 232
\href 115, 171, 202, 229, 262, 281, 287, 333, 334, 433, 440
\hskip 179
\hspace 116
\hypersetup 67, 299, 301, 302, 304–306

I

\if@ejpecp@preprint 36, 191, 197, 221, 233, 270, 297, 436, 440
\ifNAT@openbib 478
\ifx 47, 56, 59, 190, 203, 218, 225, 251, 263, 277, 283, 361, 386, 407, 416, 426
\ignorespaces 114, 181
\immediate 431
\InputIfFileExists 487
\itemindent 480, 481
\itemize 421, 422
\itemsep 348, 420, 477
\itshape 365

K

\kern 123, 134, 140, 142, 145, 148
\KEYWORDS 95

L

\labelsep . . . 345, 347, 475, 476

\labelwidth .. 343, 346, 474, 475
\Large 215, 246
\large 452
\lastskip 464
\leftmargin .. 346, 347, 475, 479
\let 93, 94, 104, 189, 211–213, 242–244, 318, 351, 421, 423, 427, 428
\list 342
\listparindent 481
\LoadClass 44
\long 315, 316

M

\maketitle 256
\MakeUppercase 339
\mathbb 23, 425, 427, 428
\mathds 23, 425, 428
\mbox 271, 436, 440
\MR 331
\msc@url 172, 262

N

\NAT@bibsetnum 472
\newif 36
\newlength 466, 467
\newline 116, 371, 382
\newtheorem .. 389–406, 410–414
\newtheoremstyle 362, 373
\noindent 112, 114, 164, 253, 258, 261, 262, 264, 267, 273, 279, 285
\nolinkurl 115
\normalfont .. 175, 436, 452, 460
\null 198
\numberwithin 417

O

\OLD@enumerate 423, 424
\OLD@itemize 421, 422
\orig@thanks 181, 189

P

\p@ 464
\p@enumiv 351
\PackageWarning 39
\PAGEEND 103
\PAGESTART 102
\PAPERNUM 100
\papernum@name 185, 201, 224, 300, 489
\par 114, 192, 215, 246, 259, 261, 265, 268, 271, 275, 282, 288, 326
\parbox 164, 220
\parindent 367, 378
\parsep 477, 482
\PassOptionsToClass 31, 34
\PDFFIELDS 296, 491, 497
\phantom 192, 234
\phantomsection 340
\prev@makefnmark@wd .. 177–179
\printdoi 171, 204, 227
\ProcessOptions 42

R

\raise ... 124–133, 135–139, 143, 144, 146, 147, 149–159
\raisebox 164, 439
\realmathbb 427
\refname 338, 339, 341
\relax 42, 104, 178, 259
\renewcommand 89, 90, 95, 96, 98–102, 105, 107, 108, 183, 352, 422, 424, 435, 441–443, 445, 453, 465, 472
\renewenvironment 336
\RequirePackage . 46, 50, 51, 53–55, 57, 60, 62, 64–66, 461
\rlap 179
\rule 164, 168

S

\sdescription 313
\section 314, 338, 445
\setbox 175
\setcounter 187
\setlength .. 345, 346, 348, 468–470, 475–477, 480–482
\settowidth 343, 474
\sfcode 354
\sffamily 254, 368, 379
\SHORTTITLE 90
\sloppy 353
\small ... 188, 254, 335, 437, 465
\smallskip 292, 318
\space 114, 122–158
\standard@itemsep 467, 469, 471
\standard@parsep . 466, 468, 470
\stitle 311
\stitle@fmt 312, 323
\string 431
\SUBMITTED 107
\subsection 453
\supplement 315
\supplement@name 310, 314
\support 213, 244
\suppsection@fmt . 314, 317, 318
\SURNAME 94

T

\textbf .. 112, 114, 165–167, 200, 223, 261, 262, 312, 434
\texttt 115, 171, 202, 229, 281, 287
\thanks .. 189, 211, 213, 242, 244
\the 178, 431
\theenumiv 352
\theoremstyle 387, 408
\thepage 439
\thispagestyle 256
\TITLE 89
\title 183, 188
\title@makefnmark 174, 212, 243
\title@thanks 181, 211, 242

U

\undefined 47, 56, 59, 190, 203, 218, 225, 251, 263, 277, 283, 361, 386, 407, 416, 426
\unhbox 179
\unkern 181
\unskip 181
\UrlFont 74
\usecounter 350

V

\vfill 492, 498
\VOLUME 99
\vrule 122, 141
\vskip 259, 464

W

\wd 178
\widowpenalty 353
\write 431
\write@ejpecp@lastpage 104, 431, 438

X

\xdef 332, 431

Y

\YEAR 101

Z

\z@ 477