

The ejpecp class*

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1 Introduction

The *ejpecp* L^AT_EX 2_ε class is designed for the typesetting of articles for the mathematical research periodicals Electronic Journal of Probability (EJP) and Electronic Communications in Probability (ECP).

2 Usage

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

3 Implementation

```
1 %% We declare and handle our class options
2 \DeclareOption{EJP}{%
3   \newcommand{\@EJP}{}
4   \newcommand{\@JOURNAL}{EJP}
5   \newcommand{\@JOURNALA}{Electron. J. Probab.}
6   \newcommand{\@JOURNALL}{Electronic Journal of Probability}
7   \newcommand{\@ISSN}{1083-6489}
8   \newcommand{\@URL}{www.imstat.org/ejp}
9 }
10 \DeclareOption{ECP}{%
11   \newcommand{\@ECP}{}
12   \newcommand{\@JOURNAL}{ECP}
13   \newcommand{\@JOURNALA}{Electron. Commun. Probab.}
14   \newcommand{\@JOURNALL}{Electronic Communications in Probability}
15   \newcommand{\@ISSN}{1083-589X}
16   \newcommand{\@URL}{www.imstat.org/ecp}
17 }
18 \DeclareOption{NOAMS}{% prevents the load of AMS packages
19   \newcommand{\@NOAMS}{}
20 }
21 \DeclareOption{NODS}{% asks to avoid renaming \mathbb into \mathds
22   \newcommand{\@NODS}{}
23 }
24 \DeclareOption{PSTRICKS}{% pstricks and pspicture.
25   % File must be compiled with "latex --shell-escape", then use dvipdf
26   \newcommand{\@PSTRICKS}{}
27 }
28 \DeclareOption{draft}{%
29   \PassOptionsToClass{draft}{article}
30 }
31 \DeclareOption{final}{%
32   \PassOptionsToClass{final}{article}
33 }
34 \DeclareOption*{%
35   \PackageWarning{ejpecp}{Unknown option '\CurrentOption'}%
```

*.dtx ejpecp file v1.6 dated 2019/03/28.


```

99 \newcommand{\PAGEEND}[1]{\renewcommand{\@PAGEEND}{#1}}
100 \newcommand{\SUBMITTED}[1]{\renewcommand{\@SUBMITTED}{#1}}
101 \newcommand{\ACCEPTED}[1]{\renewcommand{\@ACCEPTED}{#1}}
102 \newcommand{\DOI}[1]{\gdef\@DOI{#1}}
103 \newcommand{\ARXIVID}[1]{\gdef\@ARXIVID{#1}}
104 \newcommand{\HALID}[1]{\gdef\@HALID{#1}}
105 \newcommand{\ACKNO}[1]{\noindent\textbf{Acknowledgments.} #1}
106 \def\EMAIL#1{E-mail:~\texttt{\href{mailto:#1}{\nolinkurl{#1}}}}
107 \newcommand{\BEMAIL}[1]{\newline\hspace*{1.8em}\EMAIL{#1}} % useful in ftnotes
108 %% Logos
109 \newcommand{\@EJPLGO}{% designed by KB.
110 % This version is for bera 10pt (depends on the font via "em" and "ex")
111 \centerline{%
112 \hbox{%
113 \vrule height -0.4 pt depth 0.8 pt width 27.7 em\space
114 \kern -27.8 em\space
115 \raise 0.03ex \hbox {\bf E}\space
116 \raise 0.06ex \hbox {l}\space
117 \raise .13ex \hbox {e}\space
118 \raise .24ex \hbox {c}\space
119 \raise .45ex \hbox {t}\space
120 \raise .78ex \hbox {r}\space
121 \raise 1.31ex \hbox {o}\space
122 \raise 2.08ex \hbox {n}\space
123 \raise 3.14ex \hbox {i}\space
124 \raise 4.53ex \hbox {c}\space
125 \kern 1em\space
126 \raise 8.15ex \hbox {\bf J}\space
127 \raise 10.15ex \hbox {o}\space
128 \raise 12.04ex \hbox {u}\space
129 \raise 13.60ex \hbox {r}\space
130 \raise 14.64ex \hbox {n}\space
131 \kern .3 em\space
132 \vrule depth 0.8pt height 14.5ex \space
133 \kern -.3em\space
134 \raise 15ex \hbox {a}\space
135 \raise 14.64ex \hbox {l}\space
136 \kern 1em\space
137 \raise 12.04ex \hbox {o}\space
138 \raise 10.15ex \hbox {f}\space
139 \kern 1em\space
140 \raise 6.23ex \hbox {\bf P}\space
141 \raise 4.53ex \hbox {r}\space
142 \raise 3.14ex \hbox {o}\space
143 \raise 2.08ex \hbox {b}\space
144 \raise 1.31ex \hbox {a}\space
145 \raise .78ex \hbox {b}\space
146 \raise .45ex \hbox {i}\space
147 \raise .24ex \hbox {l}\space
148 \raise .13ex \hbox {i}\space
149 \raise .06ex \hbox {t}\space
150 \raise .03ex \hbox {y}}%
151 }%
152 }%
153 }%EJPLGO
154 \newcommand{\@ECPLOGO}{% designed when Ren\’e Carmona was in charge of ECP
155 \raisebox{0.3cm}{\parbox[t]{1.3in}{\noindent\rule{1.3in}{1.6pt}}\
156 \textbf{ ELECTRONIC}\
157 \textbf{ COMMUNICATIONS}\
158 \textbf{ in PROBABILITY}\
159 \rule{.08in}{1.3in}{1.6pt}}}%
160 }%ECPLOGO
161 \def\@doiprefix{https://doi.org/}

```

```

162 \def\printdoi{\texttt{\href{\@doiprefix\@DOI}{\@doiprefix\@DOI}}}
163 %% Macro handling the first page
164 \newcommand{\FIRSTPAGE}{%
165   \setcounter{page}{\@PAGESTART}%
166   \title{\small
167     \ifx\@EJP\undefined\else
168       \@EJPLOGO
169       \bigskip
170       \centerline{\@JOURNALA\ \textbf{\@VOLUME} (\@YEAR),\
171         no. \@PAPERNUM, \,\@PAGESTART--\@PAGEEND.}%
172       \centerline{ISSN:\ \texttt{\href{http://\@URL/}{\@ISSN}}} \%
173       \ifx\@DOI\undefined\else
174         \ \printdoi
175       \fi}%
176       \bigskip
177       \bigskip
178       {\Large\bfseries\@TITLE}%
179     \fi
180     \ifx\@ECP\undefined
181     \else
182       \parbox[t]{9cm}{%
183         \@JOURNALA\ \textbf{\@VOLUME} (\@YEAR),
184         no. \@PAPERNUM, \@PAGESTART--\@PAGEEND.\@
185         \ifx\@DOI\undefined
186         \else
187           \ \printdoi
188         \fi \\\
189         ISSN:\ \texttt{\href{http://\@URL/}{\@ISSN}}} \%
190       }%
191       \hfill
192       \@ECPLOGO\\
193       \bigskip
194       \bigskip
195       {\Large\@TITLE}%
196     \fi
197   }% end title
198 \date{%
199   \ifx\@DEDICATORY\undefined
200   \else
201     \noindent
202     \emph{\small\sffamily\@DEDICATORY}%
203   \fi}%
204 \maketitle\thispagestyle{empty}%
205 \begin{abstract}%
206   \noindent
207   \@ABSTRACT\par\vskip 1em\relax
208   {\footnotesize
209     \noindent\textbf{Keywords: }\@KEYWORDS.\par
210     \noindent\textbf{AMS MSC 2010: }%
211     \ifx\@AMSSUBJSECONDARY\undefined
212       \noindent
213       \@AMSSUBJ.\par
214     \else
215       \noindent
216       Primary \@AMSSUBJ, Secondary \@AMSSUBJSECONDARY.\par
217     \fi
218     \noindent
219     Submitted to \@JOURNAL\ on \@SUBMITTED,
220     final version accepted on \@ACCEPTED.\par
221     \ifx\@ARXIVID\undefined
222     \else
223       \noindent
224       Supersedes

```

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225     \texttt{\href{http://arXiv.org/abs/\@ARXIVID}{arXiv:\@ARXIVID}}.%
226 \fi\par
227 \ifx\@HALID\undefined
228 \else
229     \noindent
230     Supersedes
231     \texttt{\href{http://hal.archives-ouvertes.fr/\@HALID}{HAL:\@HALID}}.%
232 \fi\par
233 }%footnotesize
234 \end{abstract}
235
236 \smallskip
237
238 }%END-FIRSTPAGE
239 %% Macro setting the PDF title
240 \newcommand{\PDFFIELDS}{%
241 \hypersetup{%
242     pdftitle={\@JOURNAL\ \@VOLUME\ (\@YEAR), no. \@PAPERNUM, \@doiprefix\@DOI}}%
243 \hypersetup{pdfkeywords={\@KEYWORDS}}%
244 \hypersetup{pdfproducer={\@JOURNAL\ Managing Editor http://\@URL/}}%
245 \hypersetup{pdfcreator={LaTeX with ejpecp.cls v1.4}}%
246 \hypersetup{pdfsubject={Probability Theory}}%
247 \hypersetup{pdfauthor={Please see \@doiprefix\@DOI}}%
248 }%END-PDFFIELDS
249
250 %% Bibliography
251 \def\@MRExtract#1 #2!{#1} % thanks, Martin!
252 \newcommand{\MR}[1]{% we need to strip the "(...)"
253 \xdef\@MRSTRIP{\@MRExtract#1 !}%
254 \href{http://www.ams.org/mathscinet-getitem?mr=\@MRSTRIP}{MR-\@MRSTRIP}}
255 \newcommand{\ARXIV}[1]{\href{http://arXiv.org/abs/#1}{arXiv:#1}}
256 \renewenvironment{thebibliography}[1]
257 {%
258     \section*{\refname
259     \@mkboth{\MakeUppercase\refname}{\MakeUppercase\refname}}%
260     \phantomsection
261     \addcontentsline{toc}{section}{\refname}%
262     \list{\@biblabel{\@arabic\c@enumiv}}%
263     {\settowidth\labelwidth{\@biblabel{#1}}%
264     \small
265     \setlength{\labelsep}{0.4em}%
266     \setlength{\leftmargin}{\labelwidth}%
267     \addtolength{\leftmargin}{\labelsep}%
268     \setlength{\itemsep}{-.25em}%
269     \@openbib@code
270     \usecounter{enumiv}%
271     \let\p@enumiv\empty
272     \renewcommand\theenumiv{\@arabic\c@enumiv}}%
273     \sloppy\clubpenalty4000\clubpenalty\clubpenalty\widowpenalty4000%
274     \sfcode'\.\@m
275 }{%
276     \def\@noitemerr{%
277     \@latex@warning{Empty 'thebibliography' environment}}%
278     \endlist
279 }
280 %% Theorem styles
281 \ifx\@NOAMS\undefined
282 \newtheoremstyle{ejpecpbodyit}% name % cf. thmtest.tex of AMSLaTeX
283     {3pt} % Space above
284     {3pt} % Space below
285     {\itshape} % Body font
286     {} % Indent amount (empty = no indent,
287     % \parindent = para indent)

```

```

288     {\bfseries\sffamily}      % Thm head font
289     {.}                      % Punctuation after thm head
290     { }                      % Space after thm head: " " = normal interword space;
291                               % \newline = linebreak
292     {}                        % Thm head spec (can be left empty, meaning 'normal')
293     \newtheoremstyle{ejpecpbodyrm}% name % cf. thmtest.tex of AMSLaTeX
294     {3pt}                    % Space above
295     {3pt}                    % Space below
296     {}                        % Body font
297     {}                        % Indent amount (empty = no indent,
298                               % \parindent = para indent)
299     {\bfseries\sffamily}      % Thm head font
300     {.}                      % Punctuation after thm head
301     { }                      % Space after thm head: " " = normal interword space;
302                               % \newline = linebreak
303     {}                        % Thm head spec (can be left empty, meaning 'normal')
304 \fi
305 %%
306 \ifx\@NOAMS\undefined
307   \theoremstyle{ejpecpbodyit}
308 \fi
309 \newtheorem{theorem}{Theorem}[section]
310 \newtheorem{assumptions}[theorem]{Assumptions}
311 \newtheorem{assumption}[theorem]{Assumption}
312 \newtheorem{claim}[theorem]{Claim}
313 \newtheorem{condition}[theorem]{Condition}
314 \newtheorem{conjecture}[theorem]{Conjecture}
315 \newtheorem{corollary}[theorem]{Corollary}
316 \newtheorem{definitions}[theorem]{Definitions}
317 \newtheorem{definition}[theorem]{Definition}
318 \newtheorem{facts}[theorem]{Facts}
319 \newtheorem{fact}[theorem]{Fact}
320 \newtheorem{heuristics}[theorem]{Heuristics}
321 \newtheorem{hypothesis}[theorem]{Hypothesis}
322 \newtheorem{hypotheses}[theorem]{Hypotheses}
323 \newtheorem{lemma}[theorem]{Lemma}
324 \newtheorem{notations}[theorem]{Notations}
325 \newtheorem{notation}[theorem]{Notation}
326 \newtheorem{proposition}[theorem]{Proposition}
327 \ifx\@NOAMS\undefined
328   \theoremstyle{ejpecpbodyrm}
329 \fi
330 \newtheorem{example}[theorem]{Example}
331 \newtheorem{exercise}[theorem]{Exercise}
332 \newtheorem{problem}[theorem]{Problem}
333 \newtheorem{question}[theorem]{Question}
334 \newtheorem{remark}[theorem]{Remark}
335 %% Numbering
336 \ifx\@NOAMS\undefined
337   \numberwithin{equation}{section}
338 \fi
339 %% Itemize and enumerate for bera
340 \newcommand{\@reduceitemsep}{\addtolength{\itemsep}{-0.5\baselineskip}}
341 \let\OLD@itemize\itemize
342 \renewcommand\itemize{\OLD@itemize\@reduceitemsep}
343 \let\OLD@enumerate\enumerate
344 \renewcommand\enumerate{\OLD@enumerate\@reduceitemsep}
345 %% Replace \mathbb by \mathds except if we require the contrary
346 \ifx\@NODS\undefined
347   \let\realmathbb=\mathbb
348   \let\mathbb=\mathds
349 \fi
350 %% Headings

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```

351 \newcommand{\@HBLOB}{%
352   \href{\@doiprefix\@DOI}%
353     {\@JOURNAL\ \textbf{\@VOLUME}\, (\@YEAR),\ paper \@PAPERNUM.}}
354 \renewcommand{\@evenfoot}{%
355   \normalfont\footnotesize\@HBLOB\hfil
356   \small\raisebox{-1em}{Page \thepage/\@PAGEEND}\hfil
357   \footnotesize\href{http://\@URL/}{http://\@URL/}}
358 \renewcommand{\@oddfoot}{\@evenfoot}
359 \renewcommand{\@evenhead}{\hfil\@SHORTTITLE\hfil}
360 \renewcommand{\@oddhead}{\@evenhead}
361 %% smaller sections titles
362 \renewcommand{\section}{%
363   \@startsection
364     {section}
365     {1}
366     {0em}
367     {\baselineskip}
368     {0.5\baselineskip}
369     {\normalfont\large\bfseries}}
370 \renewcommand{\subsection}{%
371   \@startsection
372     {subsection}
373     {2}
374     {0em}
375     {\baselineskip}
376     {0.25\baselineskip}
377     {\normalfont\bfseries}}
378 \IfFileExists{ejpecp-hook.sty}{\RequirePackage{ejpecp-hook}}{}
379 %% Macros
380 \AtBeginDocument{\FIRSTPAGE\PDFFIELDS}
381 \AtEndDocument{\vfill}

```