

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   \makeatletter
4   \newcommand{\@JOURNAL}{EJP}
5   \newcommand{\@JOURNALL}{Electronic Journal of Probability}
6   \newcommand{\@EJP}{}
7   \newcommand{\@ISSN}{1083-6489}
8   \newcommand{\@URL}{ejp.ejpecp.org}
9   \makeatother
10 }
11 \DeclareOption{ECP}{%
12   \makeatletter
13   \newcommand{\@JOURNAL}{ECP}
14   \newcommand{\@JOURNALL}{Electronic Communications in Probability}
15   \newcommand{\@ECP}{}
16   \newcommand{\@ISSN}{1083-589X}
17   \newcommand{\@URL}{ecp.ejpecp.org}
18   \makeatother
19 }
20 \DeclareOption{NODS}{% asks to avoid renaming \mathbb into \mathds
21   \makeatletter
22   \newcommand{\@NODS}{}
23   \makeatother
24 }
25 \DeclareOption{draft}{%
26   \PassOptionsToClass{draft}{article}
27 }
28 \DeclareOption{final}{%
29   \PassOptionsToClass{final}{article}
30 }
31 \DeclareOption*{%
32   \PackageWarning{ejpecp}{Unknown option \@CurrentOption}%
33 }
34 %\ExecuteOptions{EJP}
35 \ProcessOptions\relax
```

*.dtx ejpecp file v. v0.57 dated 2011/12/01.

```

36 %% We use the standard article class
37 \LoadClass[a4paper,10pt,twoside]{article}
38 %% Packages and their options
39 \RequirePackage{xstring}
40 \RequirePackage[pdftex]{graphicx}
41 \DeclareGraphicsExtensions{.pdf,.PDF,.eps,.EPS,.png,.PNG,.jpg,.JPG,.jpeg,.JPEG}
42 \RequirePackage{amsmath,amsfonts,amssymb,amsthm,latexsym,dsfont}
43 \RequirePackage{geometry}
44 \geometry{a4paper,portrait,left=4.5cm,right=2.5cm,top=3.5cm,bottom=3.5cm}
45 %%\RequirePackage{charter} % Ph. Carmona
46 \RequirePackage{bera} % beware that the logo is sensitive to default font change
47 \RequirePackage[pdftex]{hyperref}
48 \hypersetup{colorlinks=false,urlcolor=black,citecolor=black}
49 \hypersetup{pdfcreator=PDFLaTeX with ejpecp class}
50 %%% Macros et Environments
51 %% General macros
52 \makeatletter%
53 \newcommand{\@TITLE}{FIXME!}
54 \newcommand{\@SHORTTITLE}{FIXME!}
55 \newcommand{\@KEYWORDS}{FIXME!}
56 \newcommand{\@AMSSUBJ}{FIXME!}
57 \newcommand{\@ABSTRACT}{FIXME!}
58 \newcommand{\@VOLUME}{0}
59 \newcommand{\@PAPERNUM}{0}
60 \newcommand{\@YEAR}{2012}
61 \newcommand{\@PAGESTART}{0}
62 \newcommand{\@PAGEEND}{0}
63 \newcommand{\@SUBMITTED}{FIXME!}
64 \newcommand{\@ACCEPTED}{FIXME!}
65 \newcommand{\@TITLE}[1]{\renewcommand{\@TITLE}{#1}}
66 \newcommand{\@THANKS}[1]{\gdef\@THANKS{#1}}
67 \newcommand{\@SHORTTITLE}[1]{\renewcommand{\@SHORTTITLE}{#1}}
68 \newcommand{\@AUTHORS}[1]{\author{#1}}
69 \newcommand{\@KEYWORDS}[1]{\renewcommand{\@KEYWORDS}{#1}}
70 \newcommand{\@AMSSUBJ}[1]{\renewcommand{\@AMSSUBJ}{#1}}
71 \newcommand{\@AMSSUBJSECONDARY}[1]{\gdef\@AMSSUBJSECONDARY{#1}}
72 \newcommand{\@ABSTRACT}[1]{\renewcommand{\@ABSTRACT}{#1}}
73 \newcommand{\@VOLUME}[1]{\renewcommand{\@VOLUME}{#1}}
74 \newcommand{\@PAPERNUM}[1]{\renewcommand{\@PAPERNUM}{#1}}
75 \newcommand{\@YEAR}[1]{\renewcommand{\@YEAR}{#1}}
76 \newcommand{\@PAGESTART}[1]{\renewcommand{\@PAGESTART}{#1}}
77 \newcommand{\@PAGEEND}[1]{\renewcommand{\@PAGEEND}{#1}}
78 \newcommand{\@SUBMITTED}[1]{\renewcommand{\@SUBMITTED}{#1}}
79 \newcommand{\@ACCEPTED}[1]{\renewcommand{\@ACCEPTED}{#1}}
80 \newcommand{\@DOI}[1]{\gdef\@DOI{10.1214/\@JOURNAL.#1}}
81 \newcommand{\@ARXIVID}[1]{\gdef\@ARXIVID{#1}}
82 \makeatother
83 %% Logos
84 \makeatletter
85 \newcommand{\@EJPLOGO}{% designed by KB.
86 % This version is for bera 10pt (depends on the font via "em" and "ex")
87 \centerline {%
88 \hbox {%
89 \vrule height -0.4 pt depth 0.8 pt width 26.5 em\space %
90 \vrule height -0.4 pt depth 0.8 pt width 27.7 em\space %
91 \kern -26.5 em\space %
92 \kern -27.8 em\space %
93 \raise 0.03ex \hbox {\bf E}\space %
94 \raise 0.06ex \hbox {l}\space %
95 \raise .13ex \hbox {e}\space %
96 \raise .24ex \hbox {c}\space %
97 \raise .45ex \hbox {t}\space %
98 \raise .78ex \hbox {r}\space %

```

```

99      \raise 1.31ex \hbox {o}\space %
100     \raise 2.08ex \hbox {n}\space %
101     \raise 3.14ex \hbox {i}\space %
102     \raise 4.53ex \hbox {c}\space %
103     \kern 1em\space %
104     \raise 8.15ex \hbox {\bf J}\space %
105     \raise 10.15ex \hbox {o}\space %
106     \raise 12.04ex \hbox {u}\space %
107     \raise 13.60ex \hbox {r}\space %
108     \raise 14.64ex \hbox {n}\space %
109     \kern .3 em\space %
110     \vrule depth 0.8pt height 14.5ex \space % %BEST!
111     \kern -.3em\space %
112     \raise 15ex \hbox {a}\space %
113     \raise 14.64ex \hbox {l}\space %
114     \kern 1em\space %
115     \raise 12.04ex \hbox {o}\space %
116     \raise 10.15ex \hbox {f}\space %
117     \kern 1em\space %
118     \raise 6.23ex \hbox {\bf P}\space %
119     \raise 4.53ex \hbox {r}\space %
120     \raise 3.14ex \hbox {o}\space %
121     \raise 2.08ex \hbox {b}\space %
122     \raise 1.31ex \hbox {a}\space %
123     \raise .78ex \hbox {b}\space %
124     \raise .45ex \hbox {i}\space %
125     \raise .24ex \hbox {l}\space %
126     \raise .13ex \hbox {i}\space %
127     \raise .06ex \hbox {t}\space %
128     \raise .03ex \hbox {y}%
129   }%
130 }%
131 }%EJPLOGO
132 \newcommand{\@ECPLOGO}{% designed when Ren\'e Carmona was in charge of ECP
133   \raisebox{0.3cm}{\parbox[t]{1.6in}{\noindent\rule{1.6in}{1.6pt}}\
134     \textbf{ ELECTRONIC}\
135     \textbf{ COMMUNICATIONS}\
136     \textbf{ in PROBABILITY}\
137     \rule[.08in]{1.6in}{2pt}}}
138 }%ECPLOGO
139 \makeatother
140 %% Macro handling the first page
141 \makeatletter
142 \newcommand{\FIRSTPAGE}{%
143   \setcounter{page}{\@PAGESTART}%
144   \title{\small%
145     \ifx\@EJP\undefined\else%
146       \@EJPLOGO
147       \bigskip
148       \centerline{Vol.\,\@VOLUME\, (\@YEAR),\
149         Paper no. \@PAPERNUM, pages \,\@PAGESTART--\@PAGEEND.}
150       \bigskip
151       \bigskip
152       {\Large\bfseries\@TITLE}\ifx\@THANKS\undefined\else\thanks{\@THANKS}\fi
153       \fi\@EJP
154       \ifx\@ECP\undefined\else%
155         \emph{Elect. Comm. in Probab.}
156         \textbf{\@VOLUME} (\@YEAR), \@PAGESTART--\@PAGEEND
157         \hfill
158         \@ECPLOGO\
159         \bigskip
160         \bigskip
161         {\Large\@TITLE\ifx\@THANKS\undefined\else\thanks{\@THANKS}\fi}

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```

162 \fi%ECP
163 } % end title
164 \date{}%
165 \maketitle\thispagestyle{empty}%
166 \begin{abstract}%
167 \noindent%
168 \@ABSTRACT\[\[1.5em]%
169 {\footnotesize\newlength{\@DH}\setlength{\@DH}{-.2em}%
170 \textbf{Key words: }%
171 \@KEYWORDS.\[\[DH]%
172 \textbf{AMS 2010 Subject Classification: }%
173 \ifx\@AMSSUBJSECONDARY\undefined
174 \@AMSSUBJ.
175 \else
176 Primary \@AMSSUBJ, Secondary \@AMSSUBJSECONDARY.
177 \fi\
178 \@JOURNAL\ (\@JOURNAL),\ ISSN:\ \texttt{\href{http://\@URL/}{\@ISSN}}.\[\[DH]%
179 Submitted to \@JOURNAL\ on \,\@SUBMITTED, %
180 final version accepted \,\@ACCEPTED.\[\[DH]%
181 \ifx\@DOI\undefined\else%
182 Digital Object Identifier (DOI): %
183 \texttt{\href{http://dx.doi.org/\@DOI}{\@DOI}}\[\[DH]%
184 \fi%
185 \ifx\@ARXIVID\undefined\else%
186 Supersedes %
187 \texttt{\href{http://arXiv.org/abs/\@ARXIVID}{arXiv:\@ARXIVID}}.%
188 \fi%
189 }%footnotesize
190 \end{abstract}
191
192 \smallskip
193
194 }%END-FIRSTPAGE
195 \makeatother
196 %% Bibliography
197 \makeatletter
198 \newcommand{\MR}[1]{% we need to strip the "(...)"
199 \def\@MRBLOB#1{ % add fake "(" to force presence of "("
200 \StrBefore{\@MRBLOB}{\@MRSTRIP} % do the strip with xstring package!
201 \href{http://www.ams.org/mathscinet-getitem?mr=\@MRSTRIP}{MR-\@MRSTRIP}}
202 \makeatother
203 \newcommand{\ARXIV}[1]{\href{http://arXiv.org/abs/#1}{arXiv:#1}}
204 \makeatletter
205 \renewenvironment{thebibliography}[1]{%
206 \section*{\refname
207 \@mkboth{\MakeUppercase\refname}{\MakeUppercase\refname}}%
208 \list{\@biblabel{\@arabic\c@enumiv}}{%
209 \small%
210 \setlength{\labelwidth}{0em}%
211 \setlength{\labelsep}{0.4em}%
212 \setlength{\leftmargin}{\labelwidth}%
213 \addtolength{\leftmargin}{\labelsep}%
214 \setlength{\itemsep}{-.25em}%
215 \@openbib@code
216 \usecounter{enumiv}%
217 \let\p@enumiv\empty
218 \renewcommand\theenumiv{\@arabic\c@enumiv}}%
219 \sloppy
220 \clubpenalty4000
221 \clubpenalty \clubpenalty
222 \widowpenalty4000%
223 \sfcode'\.\@m}%
224 \def\@noitemerr{%

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225 \latexwarning{Empty 'thebibliography' environment}}%
226 \endlist}
227 \makeatother
228 %% Theorem styles
229 \newtheoremstyle{ejpecpbodyit}% name % cf. thmtest.tex of AMSLaTeX
230 {3pt}% Space above
231 {3pt}% Space below
232 {\itshape}% Body font
233 {}% Indent amount (empty = no indent,
234 % \parindent = para indent)
235 {\bfseries\sffamily}% Thm head font
236 {.%}% Punctuation after thm head
237 { }% Space after thm head: " " = normal interword space;
238 % \newline = linebreak
239 {}% Thm head spec (can be left empty, meaning 'normal')
240 \newtheoremstyle{ejpecpbodyrm}% name % cf. thmtest.tex of AMSLaTeX
241 {3pt}% Space above
242 {3pt}% Space below
243 {}% Body font
244 {}% Indent amount (empty = no indent,
245 % \parindent = para indent)
246 {\bfseries\sffamily}% Thm head font
247 {.%}% Punctuation after thm head
248 { }% Space after thm head: " " = normal interword space;
249 % \newline = linebreak
250 {}% Thm head spec (can be left empty, meaning 'normal')
251 %%
252 \theoremstyle{ejpecpbodyit}
253 \newtheorem{theorem}[Theorem]{Theorem}%
254 \newtheorem{corollary}[theorem]{Corollary}%
255 \newtheorem{proposition}[theorem]{Proposition}%
256 \newtheorem{lemma}[theorem]{Lemma}%
257 \newtheorem{definition}[theorem]{Definition}%
258 \newtheorem{hypothesis}[theorem]{Hypothesis}%
259 \newtheorem{heuristics}[theorem]{Heuristics}%
260 \newtheorem{conjecture}[theorem]{Conjecture}%
261 \theoremstyle{ejpecpbodyrm}%
262 \newtheorem{example}[theorem]{Example}%
263 \newtheorem{exercise}[theorem]{Exercise}%
264 \newtheorem{problem}[theorem]{Problem}%
265 \newtheorem{remark}[theorem]{Remark}%
266 %%%% Commands to be executed before \begin{document}
267 %% Numbering
268 \numberwithin{equation}{section}
269 %% Itemize and enumerate for bera
270 \makeatletter
271 \newcommand{\@reduceitemsep}{\addtolength{\itemsep}{-0.5\baselineskip}}
272 \let\OLD@itemize\itemize
273 \renewcommand\itemize{\OLD@itemize\@reduceitemsep}
274 \let\OLD@enumerate\enumerate
275 \renewcommand\enumerate{\OLD@enumerate\@reduceitemsep}
276 \makeatother
277 %% Replace \mathbb by \mathds except if we require the contrary
278 \makeatletter
279 \ifx\@NODS\undefined\let\mathbb=\mathds\else\fi
280 \makeatother
281 %% Headings
282 \makeatletter
283 \renewcommand{\@evenfoot}
284 {\small\normalfont}
285 \newcommand{\@ARTICLEBLOB}{\@JOURNAL\normalfont\ Vol. \@VOLUME, (\@YEAR),\ %
286 Paper no. \@PAPERNUM, pages \,@PAGESTART--\@PAGEEND.}
287 \href{http://dx.doi.org/\@DOI}{\@ARTICLEBLOB}\ %

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288 \hfil\href{http://\@URL}{\@URL}}
289 \renewcommand{\@oddfoot}{\@evenfoot}
290 \renewcommand{\@evenhead}
291 {\small\upshape {\thepage}\ \hfil\@SHORTTITLE\hfil}
292 \renewcommand{\@oddhead}
293 {\small\hfil\@SHORTTITLE\hfil \upshape\ \thepage}
294 \makeatother
295 %% smaller sections titles
296 \makeatletter
297 \renewcommand{\section}{\@startsection%
298 {section}% % name
299 {1}% % level
300 {0em}% % indent
301 {\baselineskip}% % before skip
302 {0.5\baselineskip}% % after skip
303 {\normalfont\large\bfseries}}% % style
304 \renewcommand{\subsection}{\@startsection%
305 {subsection}% % name
306 {2}% % level
307 {0em}% % indent
308 {\baselineskip}% % before skip
309 {0.25\baselineskip}% % after skip
310 {\normalfont\bfseries}}% % style
311 }
312 \makeatother
313 %% Macros
314 %%% Commands to be executed just after \begin{document}
315 \AtBeginDocument{%
316 \FIRSTPAGE%
317 }
318 %%% Commands to be executed just before \end{document}
319 \AtEndDocument{\vfill}

```