

The ejpecp class*

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1 Introduction

The EJPECP \LaTeX 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 use the standard article class
2 \LoadClass[a4paper,10pt,twoside]{article}
3 %% We declare and handle our class options
4 \DeclareOption{EJP}{%
5   \makeatletter
6   \newcommand{\@JOURNAL}{EJP}
7   \newcommand{\@JOURNALL}{Electronic Journal of Probability}
8   \newcommand{\@EJP}{}
9   \newcommand{\@URL}{\href{http://ejp.ejpecp.org/}{ejp.ejpecp.org}}
10  \makeatother
11 }
12 \DeclareOption{ECP}{%
13   \makeatletter
14   \newcommand{\@JOURNAL}{ECP}
15   \newcommand{\@JOURNALL}{Electronic Communications in Probability}
16   \newcommand{\@ECP}{}
17   \newcommand{\@URL}{\href{http://ecp.ejpecp.org/}{ecp.ejpecp.org}}
18   \makeatother
19 }
20 \DeclareOption{NODS}{% asks to avoid renaming \mathbb into \mathds
```

*.dtx ejpecp file v. v0.5 dated 2011/11/26.

```

21 \makeatletter
22 \newcommand{\@NODS}{}
23 \makeatother
24 }
25 \DeclareOption*{%
26 \PackageWarning{ejpecp}{Unknown option \CurrentOption}%
27 }
28 %\ExecuteOptions{EJP}
29 \ProcessOptions\relax
30 %%% Packages and their options
31 \RequirePackage{xstring}
32 \RequirePackage[pdftex]{graphicx}
33 \DeclareGraphicsExtensions{.pdf,.PDF,.eps,.EPS,.png,.PNG,.jpg,.JPG,.jpeg,.JPEG}
34 \RequirePackage{amsmath,amsfonts,amssymb,amsthm,latexsym,dsfont}
35 \RequirePackage{geometry}
36 \geometry{a4paper,portrait,left=4.5cm,right=2.5cm,top=3.5cm,bottom=3.5cm}
37 %\RequirePackage{charter} % Ph. Carmona
38 \RequirePackage{bera}
39 \RequirePackage[pdftex]{hyperref}
40 \hypersetup{colorlinks=false,urlcolor=black,citecolor=black}
41 \hypersetup{pdfcreator=PDFLaTeX with ejpecp class}
42 %%% Macros et Environments
43 %% General macros
44 \makeatletter%
45 \newcommand{\@TITLE}{FIXME!}
46 \newcommand{\@SHORTTITLE}{FIXME!}
47 \newcommand{\@KEYWORDS}{FIXME!}
48 \newcommand{\@AMSSUBJ}{FIXME!}
49 \newcommand{\@ABSTRACT}{FIXME!}
50 \newcommand{\@VOLUME}{0}
51 \newcommand{\@PAPERNUM}{0}
52 \newcommand{\@YEAR}{2012}
53 \newcommand{\@PAGESTART}{0}
54 \newcommand{\@PAGEEND}{0}
55 \newcommand{\@SUBMITTED}{FIXME!}
56 \newcommand{\@ACCEPTED}{FIXME!}
57 \newcommand{\TITLE}[1]{\renewcommand{\@TITLE}{#1}}
58 \newcommand{\THANKS}[1]{\gdef\@THANKS{#1}}
59 \newcommand{\SHORTTITLE}[1]{\renewcommand{\@SHORTTITLE}{#1}}
60 \newcommand{\AUTHORS}[1]{\author{#1}}
61 \newcommand{\KEYWORDS}[1]{\renewcommand{\@KEYWORDS}{#1}}
62 \newcommand{\AMSSUBJ}[1]{\renewcommand{\@AMSSUBJ}{#1}}
63 \newcommand{\AMSSUBJSECONDARY}[1]{\gdef\@AMSSUBJSECONDARY{#1}}
64 \newcommand{\ABSTRACT}[1]{\renewcommand{\@ABSTRACT}{#1}}
65 \newcommand{\VOLUME}[1]{\renewcommand{\@VOLUME}{#1}}
66 \newcommand{\PAPERNUM}[1]{\renewcommand{\@PAPERNUM}{#1}}
67 \newcommand{\YEAR}[1]{\renewcommand{\@YEAR}{#1}}
68 \newcommand{\PAGESTART}[1]{\renewcommand{\@PAGESTART}{#1}}
69 \newcommand{\PAGEEND}[1]{\renewcommand{\@PAGEEND}{#1}}
70 \newcommand{\SUBMITTED}[1]{\renewcommand{\@SUBMITTED}{#1}}

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71 \newcommand{\ACCEPTED}[1]{\renewcommand{\@ACCEPTED}{#1}}
72 \newcommand{\DOI}[1]{\gdef\@DOI{http://dx.doi.org/#1}}
73 \newcommand{\ARXIVID}[1]{\gdef\@ARXIVID{#1}}
74 \makeatother
75 %% Logos
76 \makeatletter
77 \newcommand{\@EJPLOGO}{% designed by KB.
78   \centerline {%
79     \hbox {%
80       \% \vrule height -0.4 pt depth 0.8 pt width 26.5 em\space %
81       \vrule height -0.4 pt depth 0.8 pt width 27.7 em\space %
82       \% \kern -26.5 em\space %
83       \kern -27.8 em\space %
84       \raise 0.03ex \hbox {\bf E}\space %
85       \raise 0.06ex \hbox {l}\space %
86       \raise .13ex \hbox {e}\space %
87       \raise .24ex \hbox {c}\space %
88       \raise .45ex \hbox {t}\space %
89       \raise .78ex \hbox {r}\space %
90       \raise 1.31ex \hbox {o}\space %
91       \raise 2.08ex \hbox {n}\space %
92       \raise 3.14ex \hbox {i}\space %
93       \raise 4.53ex \hbox {c}\space %
94       \kern 1em\space %
95       \raise 8.15ex \hbox {\bf J}\space %
96       \raise 10.15ex \hbox {o}\space %
97       \raise 12.04ex \hbox {u}\space %
98       \raise 13.60ex \hbox {r}\space %
99       \raise 14.64ex \hbox {n}\space %
100      \kern .3 em\space %
101      \vrule depth 0.8pt height 14.5ex \space % %BEST!
102      \kern -.3em\space %
103      \raise 15ex \hbox {a}\space %
104      \raise 14.64ex \hbox {l}\space %
105      \kern 1em\space %
106      \raise 12.04ex \hbox {o}\space %
107      \raise 10.15ex \hbox {f}\space %
108      \kern 1em\space %
109      \raise 6.23ex \hbox {\bf P}\space %
110      \raise 4.53ex \hbox {r}\space %
111      \raise 3.14ex \hbox {o}\space %
112      \raise 2.08ex \hbox {b}\space %
113      \raise 1.31ex \hbox {a}\space %
114      \raise .78ex \hbox {b}\space %
115      \raise .45ex \hbox {i}\space %
116      \raise .24ex \hbox {l}\space %
117      \raise .13ex \hbox {i}\space %
118      \raise .06ex \hbox {t}\space %
119      \raise .03ex \hbox {y}%
120    }%

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121 }%
122 }%EJPLOGO
123 \newcommand{\@ECPLOGO}{% designed when Ren\'e Carmona was in charge of ECP
124 \raisebox{0.3cm}{\parbox[t]{1.6in}{\noindent\rule{1.6in}{1.6pt}}\
125 \textbf{ ELECTRONIC}}\
126 \textbf{ COMMUNICATIONS}}\
127 \textbf{ in PROBABILITY}}\
128 \rule{.08in}{1.6in}{2pt}}
129 }%ECPLOGO
130 \makeatother
131 %% Macro handling the first page
132 \makeatletter
133 \newcommand{\FIRSTPAGE}{%
134 \thispagestyle{empty}
135 \title{\small%
136 \ifx\@EJP\undefined\else%
137 \@EJPLOGO
138 \bigskip
139 \centerline{Vol.\,\@VOLUME\, (\@YEAR),\ %
140 Paper no. \@PAPERNUM, pages \,\@PAGESTART--\@PAGEEND.}
141 \bigskip
142 \bigskip
143 {\Large\bfseries\@TITLE}\ifx\@THANKS\undefined\else\thanks{\@THANKS}\fi
144 \fi}%EJP
145 \ifx\@ECP\undefined\else%
146 \emph{Elect. Comm. in Probab.}
147 \textbf{\@VOLUME} (\@YEAR), \@PAGESTART--\@PAGEEND
148 \hfill
149 \@ECPLOGO\
150 \bigskip
151 \bigskip
152 {\Large\scshape\@TITLE}\ifx\@THANKS\undefined\else\thanks{\@THANKS}\fi
153 \fi}%ECP
154 } % end title
155 \date{}%
156 \maketitle\thispagestyle{empty}%
157 \begin{abstract}%
158 \noindent%
159 \@ABSTRACT\[\[1.5em]%
160 \textbf{Key words: }%
161 \@KEYWORDS.\[\[.2em]%
162 \textbf{AMS 2010 Subject Classification: }%
163 \ifx\@AMSSUBJSECONDARY\undefined
164 \@AMSSUBJ.
165 \else
166 Primary \@AMSSUBJ, Secondary \@AMSSUBJSECONDARY.
167 \fi\[\[.2em]%
168 Submitted to \@JOURNAL\ on \,\@SUBMITTED, %
169 final version accepted \,\@ACCEPTED.\[\[.2em]%
170 \ifx\@ARXIVID\undefined\else%

```

```

171 Supersedes %
172 \texttt{\href{http://arXiv.org/abs/\@ARXIVID}{arXiv:\@ARXIVID}}%
173 .\ [.2em]
174 \fi%
175
176 \end{abstract}
177 }%END-FIRSTPAGE
178 \makeatother
179 %% Bibliography
180 \makeatletter
181 \newcommand{\MR}[1]{% we need to strip the "(...)"
182 \def\@MRBLOB{#1} % add fake "(" to force presence of "("
183 \StrBefore{\@MRBLOB}{\@MRSTRIP} % do the strip with xstring package!
184 \href{http://www.ams.org/mathscinet-getitem?mr=\@MRSTRIP}{MR\@MRSTRIP}}
185 \makeatother
186 \newcommand{\ARXIV}[1]{\href{http://arXiv.org/abs/#1}{arXiv:#1}}
187 \makeatletter
188 \renewenvironment{thebibliography}[1]{%
189 \section*{\refname
190 \@mkboth{MakeUppercase\refname}{MakeUppercase\refname}}%
191 \list{\@biblabel{\@arabic{c@enumiv}}}{%
192 \small%
193 \setlength{\labelwidth}{0em}%
194 \setlength{\labelsep}{0.4em}%
195 \setlength{\leftmargin}{\labelwidth}%
196 \addtolength{\leftmargin}{\labelsep}%
197 \setlength{\itemsep}{-.25em}%
198 \@openbib@code
199 \usecounter{enumiv}%
200 \let\p@enumiv\@empty
201 \renewcommand\theenumiv{\@arabic{c@enumiv}}}%
202 \sloppy
203 \clubpenalty4000
204 \@clubpenalty \clubpenalty
205 \widowpenalty4000%
206 \sfcode'\. \@m}{%
207 \def\@noitemerr{%
208 \@latex@warning{Empty 'thebibliography' environment}}%
209 \endlist}
210 \makeatother
211 %% Theorem styles
212 \newtheoremstyle{ejpecpbodyit}% name % cf. thmtest.tex of AMSLaTeX
213 {3pt}% Space above
214 {3pt}% Space below
215 {\itshape}% Body font
216 {}% Indent amount (empty = no indent,
217 % \parindent = para indent)
218 {\bfseries\sffamily}% Thm head font
219 {.%} Punctuation after thm head
220 {}% Space after thm head: " " = normal interword space;

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221      %      \newline = linebreak
222      {}%      Thm head spec (can be left empty, meaning 'normal')
223 \newtheoremstyle{ejpecpbodyrm}% name % cf. thmtest.tex of AMSLaTeX
224 {3pt}%      Space above
225 {3pt}%      Space below
226 {}%      Body font
227 {}%      Indent amount (empty = no indent,
228      %      \parindent = para indent)
229 {\bfseries\sffamily}% Thm head font
230 {.}%      Punctuation after thm head
231 { }%      Space after thm head: " " = normal interword space;
232      %      \newline = linebreak
233 {}%      Thm head spec (can be left empty, meaning 'normal')
234 %%
235 \theoremstyle{ejpecpbodyit}
236 \newtheorem{theorem}{Theorem}[section]%
237 \newtheorem{corollary}[theorem]{Corollary}%
238 \newtheorem{proposition}[theorem]{Proposition}%
239 \newtheorem{lemma}[theorem]{Lemma}%
240 \newtheorem{definition}[theorem]{Definition}%
241 \newtheorem{hypothesis}[theorem]{Hypothesis}%
242 \newtheorem{heuristics}[theorem]{Heuristics}%
243 \newtheorem{conjecture}[theorem]{Conjecture}%
244 \theoremstyle{ejpecpbodyrm}%
245 \newtheorem{example}[theorem]{Example}%
246 \newtheorem{exercise}[theorem]{Exercise}%
247 \newtheorem{problem}[theorem]{Problem}%
248 \newtheorem{remark}[theorem]{Remark}%
249 %%% Commands to be executed before \begin{document}
250 %% Replace \mathbb by \mathds except if we require the contrary
251 \makeatletter
252 \ifx\@NODS\undefined\let\mathbb=\mathds\else\fi
253 \makeatother
254 %% Headings
255 \makeatletter
256 \def\@PAPERBLOB{%
257   \@JOURNAL\normalfont\ Vol. \@VOLUME\, (\@YEAR),\ %
258   Paper no. \@PAPERNUM, pages \,\@PAGESTART--\@PAGEEND%
259 }
260 \renewcommand{\@evenfoot}
261 {\small\normalfont%
262   \ifx\@DOI\undefined\@PAPERBLOB\else\href{\@DOI}{\@PAPERBLOB}\fi.%
263   \ \hfil\@URL}
264 \renewcommand{\@oddfoot}{\@evenfoot}
265 \renewcommand{\@evenhead}
266 {\small\upshape {\thepage}\ \hfil\@SHORTTITLE\hfil}
267 \renewcommand{\@oddhead}
268 {\small\hfil\@SHORTTITLE\hfil \upshape\ \thepage}
269 \makeatother
270 %% smaller sections titles

```

```

271 \makeatletter
272 \renewcommand{\section}{\@startsection%
273   {section}%                % name
274   {1}%                      % level
275   {0em}%                    % indent
276   {\baselineskip}%          % before skip
277   {0.5\baselineskip}%        % after skip
278   {\normalfont\large\bfseries}}% % style
279 \renewcommand{\subsection}{\@startsection%
280   {subsection}%              % name
281   {2}%                      % level
282   {0em}%                    % indent
283   {\baselineskip}%          % before skip
284   {0.25\baselineskip}%        % after skip
285   {\normalfont\bfseries}}%    % style
286 }
287 \makeatother
288 %% Macros
289 %%% Commands to be executed just after \begin{document}
290 \AtBeginDocument{%
291   \FIRSTPAGE%
292 }
293 %%% Commands to be executed just before \end{document}
294 \AtEndDocument{\vfill}

```