The HEP-REFERENCE package[*]

Adjustments of standard references, footnote, and citations

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Abstract

The HEP-REFERENCE package applies some light convenience modifications to the reference, citation and footnote macros after loading standard classes improving on the default LaTeX behaviour.

1 Introduction

The HYPERREF package is loaded and the links are hidden.

`\cref` References are extended with the CLEVEREF package [1], which allows to e.g. just type `\cref{⟨key⟩}` in order to write 'figure 1'. Furthermore, the CLEVEREF package allows to reference multiple objects within one `\cref{⟨key1,key2⟩}`.

`\cite` Citations are adjusted to not start on a new line in order to avoid the repeated use of `~\cite{⟨key⟩}`.

`\ref` References are also adjusted to not start on a new line.

`\eqref`
`\subref` Footnotes are adjusted to swallow white space before the footnote mark and at the beginning of the footnote text. Additionally the reference back to the text where they are called from.

`\footnote` <*package>

A Implementation

Load the HYPERREF package [2] enable Unicode encoding and hide links.

```
1 \RequirePackage{hyperref}
2 \hypersetup{
3   pdfencoding=auto, psdextra,
4   linktoc=all, hidelinks, breaklinks=true,
5   pdfcreator={}, pdfproducer={}
6 }
7 \AtBeginDocument{\@ifpackageloaded{doc}{\hypersetup{hidelinks}}{}}
```

Ensure that unnecessary information is suppressed.

```
8 \pdfstringdefDisableCommands{\def\varepsilon{\textepsilon}}
9 \pdfstringdefDisableCommands{\def\to{\textrightarrow}}
```

---

[*]This document corresponds to HEP-REFERENCE v1.4.

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```
10 \AtBeginDocument{
11   \pdfstringdefDisableCommands{\let\ensuremath\@gobble}
12   \pdfstringdefDisableCommands{\let\mathsurround\@gobble}
13   \pdfstringdefDisableCommands{\let\unskip\@gobble}
14   \pdfstringdefDisableCommands{\let\thanks\@gobble}
15   \pdfstringdefDisableCommands{\let\footnote\@gobble}
16   \pdfstringdefDisableCommands{\let\\\@gobble}
17 }
```

Set the PDF meta data according to the paper information

```
18 \AtBeginDocument{
19   \@ifundefined{@title}{}{
20     \@ifundefined{hep@sub@title}{
21       \hypersetup{pdftitle={\@title}}
22     }{
23       \hypersetup{pdftitle={\@title: \hep@sub@title}}
24     }
25   }
26 %   \hypersetup{pdfauthor={\@author}}
27   \@ifundefined{hep@key@words}{}{%
28     \hypersetup{pdfkeywords={\hep@key@words}}%
29   }
30 }
```

A.1   Footnotes

Place a hyperlink from the footnote back to its referencing label using the FOOTNOTEBACKREF package [3].

```
31 \def\BackrefFootnoteTag{}
32 \RequirePackage{footnotebackref}
```

\footnote Ensure that no spaces appear before the footmark or at the beginning of the footnote.

```
33 \let\@foot@note\footnote
34 \renewcommand*{\footnote}[1]{\unskip\@foot@note{\ignorespaces#1}}
```

A.2   References

\ref Adjust \ref{⟨key⟩} in order to prevent preceding line breaks.

```
35 \AtBeginDocument{
36   \let\hep@ref\ref
37   \renewcommand*\ref{\no@break@before\hep@ref}
38 }
```

\eqref Adjust \eqref{⟨key⟩} from the AMSMATH package in order to prevent preceding line breaks.

```
39 \AtBeginDocument{\@ifpackageloaded{amsmath}{%
40   \renewcommand*\eqref{\no@break@before\labelcref}%
41 }{}}
```

`\usecommand` Define the `\usecommand` macro providing an anonymous function.

```
42 \providecommand*\hep@use@command{}
43 \newcommand*\usecommand[2][1]{%
44   \renewcommand*\hep@use@command[#1]{#2}\hep@use@command%
45 }
```

`\textlabel` Define the `\textlabel` macro allowing to link to a piece of text using the ETOOLBOX pcakage [4].

```
46 \RequirePackage{etoolbox}
47 \NewDocumentCommand\textlabel{O{}mO{}m}{%
48   \protected@write\@auxout{}{%
49     \string\newlabel{#2}{%
50       {\hspace{-4pt}\protecting{#1{#4}}}{\thepage}{#4}{#2}{}%
51     }%
52   }%
53   \hypertarget{#2}{}%
54   {#3{#4}}%
55 }
```

`\cref` Improve reference using the CLEVEREF package [1].

```
56 \PassOptionsToPackage{noabbrev, nameinlink}{cleveref}
57 \RequirePackage{cleveref}
58 \newcommand*{\creflastconjunction}{, and\nobreakspace}
59 \crefname{enumi}{point}{points}
60 \crefname{inlinelisti}{point}{points}
```

`\no@break@before` Define a macro able to prevent line breaks.

```
61 \newcommand*\no@break@before{%
62   \relax\ifvmode\else%
63     \ifhmode%
64       \ifdim\lastskip > 0pt%
65         \relax\unskip\nobreakspace%
66       \fi%
67     \fi%
68   \fi%
69 }
```

`\subref` Adjust `\subref{⟨key⟩}` from the SUBCAPTION package in order to prevent preceding line breaks.

```
70 \AtBeginDocument{\@ifpackageloaded{subcaption}{%
71   \let\hep@subref\subref
72   \renewcommand*\subref{\no@break@before\hep@subref}
73   \renewcommand*\subcaption@ref[2]{\begingroup%
74     \caption@setoptions{sub}%
75     \subcaption@reffmt\p@subref{\hep@ref#1{sub@#2}}%
76   \endgroup}
```

`\subcref` Provide the `\subcref` macro.

```
77   \newcommand*{\subcref}[1]{\cref{sub@#1}}
78 }{}}
```

\eqcrefname Define the `\eqcrefname` macro for named equation types.

```
79 \NewDocumentCommand{\eqcrefname}{mmo}{
80   \crefname{#1}{#2}{\IfValueTF{#3}{#3}{#2s}}
81   \creflabelformat{#1}{(##2##1##3)}
82 }
```

\labelcrefrange Define the missing `\labelcrefrange{⟨key1⟩}{⟨key2⟩}` macro.

```
83 \DeclareRobustCommand{\labelcrefrange}[2]{%
84   \@crefrangenostar{labelcref}{#1}{#2}%
85 }
```

Adjust the title page

```
86 \AtBeginDocument{\@ifpackageloaded{hep-title}{%
87   \labelcrefmultiformat{affiliation}{#2#1#3}{%
88     \textsuperscript,#2#1#3}{\textsuperscript,#2#1#3%
89   }{%
90     \textsuperscript,#2#1#3%
91   }
92   \labelcrefrangeformat{affiliation}{#3#1#4\textsuperscript{--}#5#2#6}
93 }{}}
```

A.3   Citations

\cite Adjust `\cite{⟨key⟩}` in order to prevent preceding line breaks.

```
94 \let\hep@cite\cite
95 \renewcommand*\cite{\no@break@before\hep@cite}
```

⟨/package⟩

B   Tests

⟨*test⟩

```
96  \documentclass{article}
97
98  \usepackage{amsmath}
99  \usepackage{hep-reference}
100 \usepackage{parskip}
101 \providecommand*{\cref}{section \ref}
102
103 \begin{document}
104
105 \section{Section} \label{sec:Section}
106
```

```
107 Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
108 Etiam lobortis section \ref{sec:Section}
109
110 Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
111 Etiam lobortis \cref{sec:Section}
112
113 Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
114 Etiam loborti equation \eqref{eq:Equation}
115
116 Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
117 Etiam loborti reference \cite{cite}
118
119 Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
120 \footnote{
121  Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
122 }
123
124 \begin{equation} \label{eq:Equation}
125 E=mc^2
126 \end{equation}
127
128
129 \begin{thebibliography}{1}
130 \bibitem{cite} reference
131 \end{thebibliography}
132
133 \end{document}
```

⟨/test⟩

C Readme

⟨*readme⟩

```
134 # The `hep-reference` package
135
136 A `LaTeX` package for publications in High Energy Physics.
137
138 ## Introduction
139
140 The `hep-reference` package applies some light convenience modifications
141 to the reference, citation and footnote macros after loading standard
142 classes improving on the default LaTeX behaviour.
143
144 ## Author
145
146 Jan Hajer
147
148 ## License
149
150 This file may be distributed and/or modified under the conditions of the
```

```
151 'LaTeX' Project Public License, either version 1.3c of this license or
152 (at your option) any later version. The latest version of this license is
153 in 'http://www.latex-project.org/lppl.txt' and version 1.3c or later is
154 part of all distributions of LaTeX version 2005/12/01 or later.
```

</readme>

References

[1] T. Cubitt. 'The `cleveref` package: Intelligent cross-referencing' (2006). CTAN: `cleveref`. URL: `dr-qubit.org/cleveref`.

[2] *LATEX3 Project*. 'Hypertext marks in LATEX: a manual for `hyperref`: Extensive support for hypertext in LATEX' (1995). CTAN: `hyperref`. GitHub: `latex3/hyperref`.

[3] H. Lange. 'The `footnotebackref` package: Back-references from footnotes' (2012). CTAN: `footnotebackref`.

[4] P. Lehman and J. Wright. 'The `etoolbox` package: e-TEX tools for LATEX' (2007). CTAN: `etoolbox`.