

# 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 L<sup>A</sup>T<sub>E</sub>X 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` 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}}{}}
```

---

\*This document corresponds to HEP-REFERENCE v1.1.

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Set the PDF meta data according to the paper information and ensure that unnecessary information is suppressed.

```

8 \pdfstringdefDisableCommands{\def\varepsilon{\textepsilon}}
9 \pdfstringdefDisableCommands{\def\to{\textrightarrow}}
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 }
18 \AtBeginDocument{\hypersetup{pdftitle={\@title}}}
19 \AtBeginDocument{\hypersetup{pdfauthor={\@author}}}
20 \AtBeginDocument{\@ifundefined{hep@key@words}{}{}}
21   \hypersetup{pdfkeywords={\hep@key@words}}
22 }}

```

## A.1 Footnotes

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

```

23 \def\BackrefFootnoteTag{}
24 \RequirePackage{footnotebackref}

```

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

```

25 \let\@foot@note\footnote
26 \renewcommand{\footnote}[1]{\unskip\@foot@note{\ignorespaces#1}}

```

## A.2 References

`\ref` Adjust `\ref{<key>}` in order to prevent preceding line breaks.

```

27 \AtBeginDocument{
28   \let\hep@ref\ref
29   \renewcommand\ref{\no@break@before\hep@ref}
30 }

```

`\eqref` Adjust `\eqref{<key>}` from the AMSMATH package in order to prevent preceding line breaks.

```

31 \AtBeginDocument{\@ifpackageloaded{amsmath}{%
32   \renewcommand\eqref{\no@break@before\labelcref}}
33 }{}}

```

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

```

34 \providecommand\use@command{}
35 \newcommand\usecommand[2][1]{%
36   \renewcommand\use@command[#1]{#2}\use@command%
37 }

```

`\textlabel` Define the `\textlabel` macro allowing to link to a piece of text.

```

38 \NewDocumentCommand\textlabel{0{}m0{}m}{%
39   \protected@write\@auxout{}{%
40     \string\newlabel{#2}{%
41       {\hspace{-4pt}\protecting{#1{#4}}}{\thepage}{#4}{#2}{}%
42     }%
43   }%
44   \hypertarget{#2}{}%
45   {#3{#4}}%
46 }

```

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

```

47 \PassOptionsToPackage{noabbrev, nameinlink}{cleveref}
48 \RequirePackage{cleveref}
49 \newcommand{\creflastconjunction}{, and\nobreakspace}
50 \crefname{enumi}{point}{points}
51 \crefname{inlinelisti}{point}{points}

```

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

```

52 \newcommand\no@break@before{%
53   \relax\ifvmode\else%
54     \ifhmode%
55       \ifdim\lastskip > 0pt%
56         \relax\unskip\nobreakspace%
57       \fi%
58     \fi%
59   \fi%
60 }

```

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

```

61 \AtBeginDocument{\@ifpackageloaded{subcaption}{%
62   \let\hep@subref\subref
63   \renewcommand\subref{\no@break@before\hep@subref}
64   \renewcommand*\subcaption@ref[2]{\begingroup%
65     \caption@setoptions{sub}%
66     \subcaption@reffmt\p@subref{\hep@ref#1{sub@#2}}%
67   \endgroup}

```

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

```

68 \newcommand{\subcref}[1]{\cref{sub@#1}}
69 }{}}

```

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

```

70 \NewDocumentCommand{\eqcrefname}{mmo}{
71 \crefname{#1}{#2}{\IfValueTF{#3}{#3}{#2s}}
72 \creflabelformat{#1}{(##2##1##3)}
73 }

```

`\labelcrefrange` Define the missing `\labelcrefrange{<key1>}{<key2>}` macro.

```

74 \DeclareRobustCommand{\labelcrefrange}[2]{%
75 \@crefrangenostar{labelcref}{#1}{#2}%
76 }

```

Adjust the title page

```

77 \AtBeginDocument{\@ifpackageloaded{hep-title}{%
78 \labelcrefmultiformat{affiliation}{#2#1#3}{%
79 \textsuperscript,#2#1#3}{\textsuperscript,#2#1#3%
80 }{%
81 \textsuperscript,#2#1#3%
82 }
83 \labelcrefrangeformat{affiliation}{#3#1#4\textsuperscript{--}#5#2#6}
84 }{}}

```

### A.3 Citations

`\cite` Adjust `\cite{<key>}` in order to prevent preceding line breaks.

```

85 \let\hep@cite\cite
86 \renewcommand\cite{\no@break@before\hep@cite}

```

</package>

## B Tests

<\*test>

```

87 \documentclass{article}
88
89 \usepackage{amsmath}
90 \usepackage{hep-reference}
91 \usepackage{parskip}
92 \providecommand{\cref}{section \ref}
93
94 \begin{document}
95

```

```

96 \section{Section} \label{sec:Section}
97
98 Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis section \ref{se
99
100 Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis \cref{sec:Secti
101
102 Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam loborti equation \eqref{
103
104 Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam loborti reference \cite{
105
106 Lorem ipsum dolor sit amet, consectetur adipiscing elit.
107 \footnote{
108 Lorem ipsum dolor sit amet, consectetur adipiscing elit.
109 }
110
111 \begin{equation} \label{eq:Equation}
112 E=mc^2
113 \end{equation}
114
115
116 \begin{thebibliography}{1}
117 \bibitem{cite} reference
118 \end{thebibliography}
119
120 \end{document}

```

</test>

## C Readme

<\*readme>

```

121 # The ‘hep-reference’ package
122
123 A ‘LaTeX’ package for publications in High Energy Physics.
124
125 ## Introduction
126
127 The ‘hep-reference’ package aims to provide a single style file containing most configur
128 Instead of reinventing the wheel by introducing newly created macros ‘hep-reference’ pre
129
130 For usual publications it is enough to load additionally to the ‘article’ class without
131
132 \documentclass{article}
133 \usepackage{hep-reference}
134
135 ## Author
136
137 Jan Hajer
138

```

139 ## License

140

141 This file may be distributed and/or modified under the conditions of the ‘LaTeX’ Project

142 The latest version of this license is in ‘<http://www.latex-project.org/lppl.txt>’ and ver

</readme>

## References

- [1] T. Cubitt. ‘The cleveref package: Intelligent cross-referencing’ (2006). CTAN: cleveref. URL: [dr-qubit.org/cleveref](http://dr-qubit.org/cleveref).
- [2] *L<sup>A</sup>T<sub>E</sub>X*3 Project. ‘Hypertext marks in L<sup>A</sup>T<sub>E</sub>X: a manual for hyperref: Extensive support for hypertext in L<sup>A</sup>T<sub>E</sub>X’ (1995). CTAN: hyperref. GitHub: [latex3/hyperref](https://github.com/latex3/hyperref).
- [3] H. Lange. ‘The footnotebackref package: Back-references from footnotes’ (2012). CTAN: footnotebackref.