The HEP-BIBLIOGRAPHY package*

Bibliographies for high energy physics

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Abstract

The HEP-BIBLIOGRAPHY package extends the BIBLATEX package with some functionality mostly useful for high energy physics. In particular it makes full use of all `bibtex` fields provided by `inspirehep.net`.

The package can be loaded via `\usepackage{hep-bibliography}`.

`\bibliography` `\printbibliography` The BIBLATEX package [1] is loaded for bibliography management. The user has to add the line `\bibliography{`⟨*my.bib*⟩`}` to the preamble of the document and `\printbibliography` at the end of the document. The bibliography is generated by BIBER [2]. `biblatex` is extended to be able to cope with the `collaboration` and `reportNumber` fields provided by `inspirehep.net` and a bug in the volume number is fixed. Additionally, `ctan.org`, `github.com`, `gitlab.com`, `bitbucket.org`, `launchpad.net`, `sourceforge.net`, and `hepforge.org` are valid `eprinttypes`. Errata can be included using the `related` feature.

`erratum`

```
\article{key1,
  ...,
  relatedtype="erratum",
  related="key2",
}
\article{key2,
  ...,
}
```

A Implementation

<*package>

Load the KVOPTIONS package [3] and define a `hepbib` namespace.

```
\RequirePackage{kvoptions}
\SetupKeyvalOptions{
  family=hepbib,
  prefix=hepbib@
}
```

`bibliography` Provide the `style` option for passing a `style` string to the BIBLATEX package [1] or disabling the automatic loading of `biblatex`.

*This document corresponds to HEP-BIBLIOGRAPHY v1.3.

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```
\DeclareStringOption[numeric-comp]{style}

\ProcessKeyvalOptions*
```

`\online` `\email` Define the `\online{`⟨*text*⟩`}{`⟨*url*⟩`}` macro combining the features of the `\href` and the `\url` macros. Define a macro for typesetting emails.

```
\providecommand{\online}[2]{\texttt{#2}}%
\providecommand{\hep@email}[1]{\online{mailto:#1}{#1}}
\providecommand\email{\hep@email}
\AtBeginDocument{\@ifpackageloaded{hyperref}{%
    \renewcommand{\online}[2]{\href{#1}{\nolinkurl{#2}}}%
  }{}
}
```

`commalist` (*env.*) Define a commalist environment using the `xparse` package [4].

```
\RequirePackage{xparse}
\ExplSyntaxOn
\NewDocumentEnvironment{commalist}{O{\space}+b}{
  \hep@comma@list:n{#2}
}{#1}
\seq_new:N \hep@items@sequence
\cs_new_protected:Npn \hep@comma@list:n #1{
  \seq_set_split:Nnn \hep@items@sequence{\item}{#1}
  \seq_pop_left:NN \hep@items@sequence \l_tmpa_tl
  \seq_use:Nnnn \hep@items@sequence{~and~}{,~}{,~and~}
}
\ExplSyntaxOff
```

`\bibliography` Load the BIBLATEX package [1] with the datamodel defined in appendix B.

```
\PassOptionsToPackage{
  style=\hepbib@style,
  datamodel=hep-bibliography
}{biblatex}
\RequirePackage{biblatex}
```

`hep-bibliography` Provide the `\DeclareSortingTemplate` macro for older `biblatex` installations. Define a new sorting template that sorts only multi key `\cite` entries according to their date and leaves the rest of the bibliography entries in the order they appear in the text.

```
\providecommand{\DeclareSortingTemplate}{\DeclareSortingScheme}
\DeclareSortingTemplate{hep-bibliography}{
  \sort{\citeorder}
  \sort[final]{\field{sortkey}}
  \sort{\field{sortyear} \field{year} \literal{9999}}
  \sort{\field{month}}
  \sort{\field{eprint} \field{doi}}
  \sort{\field{sorttitle} \field{title}}
  \sort{\field{subtitle} \field{volume}}
}
```

Use the new sorting scheme and abbreviat all first names.

```
\ExecuteBibliographyOptions{
  sorting=hep-bibliography,
  safeinputenc,
  giveninits=true,
  maxbibnames=7,
}
```

Redefine the `pages` filed such that leading zeros are stripped from the page numbers.

```
\newcommand\hep@strip@zero[1]{\expandafter\hep@strip@zero@helper#1}
\newcommand\hep@strip@zero@helper[1]{%
  \ifx0#1\expandafter\hep@strip@zero@helper\else#1\fi%
}
\DeclareFieldFormat{pages}{%
  \mkpageprefix[bookpagination]{\mknormrange[]{\hep@strip@zero}}{#1}%
}
```

Define an internal bibhypertarget.

```
\DeclareFieldFormat{bibhypertarget}{%
  \bibhypertarget{\thefield{entrykey}:\the\value{instcount}}{#1}%
}
```

Redefine the citation command to set the bibhypertarget and call the cite:save macro.

```
\renewbibmacro*{cite:comp}{%
  \printtext[bibhypertarget]{%
    \stepcounter{cbx@tempcntb}%
    \iffieldundef{shorthand}{%
      \ifbool{bbx:subentry}{%
        \iffieldundef{entrysetcount}{%
          \usebibmacro{cite:comp:comp}}{\usebibmacro{cite:comp:inset}%
        }%
      }{\usebibmacro{cite:comp:comp}}%
    }{\usebibmacro{cite:comp:shand}}%
  }%
  \usebibmacro{cite:save}%
}
```

Define the cite:safe macro

```
\newbibmacro*{cite:save}{%
  \ifcsundef{cbx@\thefield{entrykey}}{%
    \csxdef{cbx@\thefield{entrykey}}{\the\value{instcount}}%
  }{}%
}
```

Link from the bibliography to the first cite.

```
\newbibmacro{cbx:linktofirstcite}[1]{%
  \ifcsdef{cbx@\thefield{entrykey}}{%
```

```
    \bibhyperlink{%
      \thefield{entrykey}:\csuse{cbx@\thefield{entrykey}}%
    }{#1}%
  }{#1}%
}
```

Ensure table style numbers in the bibliography labels.

```
\providecommand{\tstyle}{}
\DeclareFieldFormat{labelnumberwidth}{%
  \usebibmacro{cbx:linktofirstcite}{\mkbibbrackets{\tstyle#1}}%
}
```

Deactivate counting during caption measurement.

```
\AtBeginDocument{\@ifpackageloaded{caption}{%
  \g@addto@macro\caption@prepareslc{\let\blx@citeprint\relax}}{}%
}
```

Shrink the biblography in two column mode.

```
\if@twocolumn
  \AtBeginBibliography{\small}
  \setlength\biblabelsep{\labelsep}
\fi
```

`translationof` Redefine the `translationof` string to fit better to documents without a original title.

```
\DefineBibliographyStrings{english}{translationof={Original}}
```

`erratum` Add new bibliography string 'Erratum' for the use in the `relatedtype` field.

```
\NewBibliographyString{erratum,erratums}
\DefineBibliographyStrings{english}{erratum={Erratum},erratums={Errata}}
\providecommand{\relateddelimerratum}{\addsemicolon\space}
```

Activate the Oxford comma when using `british` and separate title and subtitle with a colon.

```
\DefineBibliographyExtras{british}{\def\finalandcomma{\addcomma}}
\renewcommand{\subtitlepunct}{\addcolon\addspace}
```

`\printbibliography` Allow the bibliography to be printed sloppy

```
% \let\hep@printbibliography\printbibliography
% \renewcommand{\printbibliography}{{\sloppy\hep@printbibliography}}
```

A.1 Sourcemap

`\hep@reg@exp@one` `\hep@reg@exp@two` `\hep@reg@exp@url` `\hep@reg@exp@pmc` Define regular expressions in order to deal with inconsistent journal title and volume naming as well as uniform resource locator (URL) protocols and the PMCID.

```
\newcommand{\hep@reg@exp@one}{\regexp{\A(\p{L}+)?\d+(\p{L}+)?\Z}}
\newcommand{\hep@reg@exp@two}{\regexp{\A(\p{L}+)?(\d+)(\p{L}+)?\Z}}
```

```
\newcommand{\hep@reg@exp@url}{\regexp{\A(ht|f)tp(s)?:\/\/}}
\newcommand{\hep@reg@exp@pmc}{\regexp{\A(PMC)?}}
```

`\DeclareSourcemap` Use the `\DeclareSourcemap` feature.

```
\DeclareSourcemap{%
  \maps[datatype=bibtex, overwrite=true]{%
```

`collaboration` Read the collaboration information if present.

```
    \map{%
      \step[fieldsource=Collaboration, final=true]%
      \step[fieldset=collaboration, origfieldval, final=true]
    }%
```

`reportnumber` Read the pre-print information if present.

```
    \map{%
      \step[fieldsource=reportNumber, final=true]%
      \step[fieldset=reportnumber, origfieldval, final=true]
    }%
```

`journal` Move letters from the volume field to the journal field.

```
    \map[overwrite]{
      \pertype{article}
      \step[fieldsource=volume, match=\hep@reg@exp@one, final]
      \step[fieldsource=volume, match=\hep@reg@exp@two, replace={$2}]
      \step[fieldsource=journal, fieldtarget=journaltitle]
      \step[fieldset=journaltitle, fieldvalue={\space$1$2}, append=true]
    }
```

`url` Remove the protocol from URL.

```
    \map{
      \step[fieldsource=url, final=true]
      \step[fieldset=protocollessurl, origfieldval, final=true]
      \step[fieldsource=protocollessurl,
            match=\hep@reg@exp@url, replace={}]
    }
```

`pmc` Remove the PMC from the PMCID.

```
    \map{
      \step[fieldsource=pmcid, final=true]
      \step[fieldset=pmc, origfieldval, final=true]
      \step[fieldsource=pmc, match=\hep@reg@exp@pmc, replace={}]
    }
  }%
}
```

`\letbibmacro` Provide the `\letbibmacro` macro for old `biblatex` installations.

```
\providecommand{\letbibmacro}[2]{\csletcs{abx@macro@#1}{abx@macro@#2}}
```

`collaboration` Execute the author macro even if only the collaboration information if present and override the author information with collaboration information if present.

```
\renewbibmacro*{author/translator+others}{%
  \ifboolexpr{
    test \ifuseauthor and (
      not test {\ifnameundef{author}} or
      not test {\iffieldundef{collaboration}}
    )
  }
  {\usebibmacro{author}}
  {\usebibmacro{translator+others}}
}
\letbibmacro{hep@bib@author}{author}
\renewbibmacro*{author}{%
  \iffieldundef{collaboration}{%
    \usebibmacro{hep@bib@author}}{\textit{\printfield{collaboration}}%
  }%
}
```

`In:` Remove spurious 'In:' if no journal is present.

```
\renewbibmacro*{in:}{%
  \iffieldundef{journaltitle}{}{\printtext{\bibstring{in}\intitlepunct}}%
}
```

`reportnumber` Print the `reportnumber` as commalist using the RELSIZE package [5].

```
\RequirePackage{relsize}
\DeclareFieldFormat{reportnumber}{%
  \edef\commalistbody{\forcsvfield{%
    \egroup\noexpand\item\unexpanded{\bgroup\smaller[.5]\textsc}
  }{reportnumber}}%
  \expandafter\commalist\commalistbody\egroup\endcommalist%
}
```

`url` Show URLs without the protocol.

```
\DeclareFieldFormat{url}{%
  \mkbibacro{URL}\addcolon\space\online{#1}{\thefield{protocollessurl}}%
}
```

`\hep@bib@online` Private `\hep@bib@online` macro

```
\newcommand{\hep@bib@online}[2]{%
  \ifhyperref{\online{#1}{#2}}{\nolinkurl{#2}}%
}
```

pmid Present PubMed IDs.

pmcid

```
\DeclareFieldFormat{pmid}{%
  \mkbibacro{PM}\addcolon\space%
  \hep@bib@online{https://www.ncbi.nlm.nih.gov/pubmed/#1}{#1}%
}
\DeclareFieldFormat{pmc}{%
  \mkbibacro{PMC}\addcolon\space%
  \hep@bib@online{https://www.ncbi.nlm.nih.gov/pmc/articles/PMC#1}{#1}%
}
```

pmcid Add the pre-print and PubMed information if present.

pmid

reportnumber

```
\letbibmacro{hep-doi+eprint+url}{doi+eprint+url}
\renewbibmacro*{doi+eprint+url}{%
  \usebibmacro{hep-doi+eprint+url}
  \iffieldundef{pmc}{%
    \iffieldundef{pmid}{}{\printfield{pmid}\newunit}%
  }{\printfield{pmc}\newunit}
  \iffieldundef{reportnumber}{}{%
    \newunitpunct\textnumero\intitlepunct%
    \printfield{reportnumber}\newunit%
  }%
}
```

A.2 Eprints

\hep@eprint Private \hep@eprint macro

```
\NewDocumentCommand{\hep@eprint}{smm}{
  \DeclareFieldFormat{eprint:#2}{%
    \newcommand{\@path}{\IfBooleanT{#1}{\thefield{eprintclass}/}##1}%
    #2\addcolon\space\hep@bib@online{#3/\@path}{\@path}%
  }%
}
```

CDS Add CERN Document server as a eprint option

```
\hep@eprint{CDS}{https://cds.cern.ch/record}
\DeclareFieldAlias{eprint:cds}{eprint:CDS}
```

HEPData Add the repository for publication-related High-Energy Physics data as a eprint option

```
\hep@eprint{HEPData}{https://www.hepdata.net/record}
\DeclareFieldAlias{eprint:hepdata}{eprint:HEPData}
```

CTAN Add CTAN as a eprint option

```
\hep@eprint{CTAN}{https://ctan.org/pkg}
\DeclareFieldAlias{eprint:ctan}{eprint:CTAN}
```

`GitHub` Add GitHub as a eprint option

```
\hep@eprint*{GitHub}{https://github.com}
\DeclareFieldAlias{eprint:github}{eprint:GitHub}
```

`GitLab` Add GitLab as a eprint option

```
\hep@eprint*{GitLab}{https://gitlab.com}
\DeclareFieldAlias{eprint:gitlab}{eprint:GitLab}
```

`Bitbucket` Add Bitbucket as a eprint option

```
\hep@eprint*{Bitbucket}{https://bitbucket.org}
\DeclareFieldAlias{eprint:bitbucket}{eprint:Bitbucket}
```

`Launchpad` Add Launchpad as a eprint option

```
\hep@eprint{Launchpad}{https://launchpad.net}
\DeclareFieldAlias{eprint:launchpad}{eprint:Launchpad}
```

`SourceForge` Add SourceForge as a eprint option

```
\hep@eprint{SourceForge}{https://sourceforge.net/projects}
\DeclareFieldAlias{eprint:sourceforge}{eprint:SourceForge}
```

`HEPForge` Add HEPForge as a eprint option

```
\DeclareFieldFormat{eprint:hepforge}{%
  HEPForge\addcolon\space\hep@bib@online{https://#1/hepforge.org}{#1}%
}
\DeclareFieldAlias{eprint:HEPForge}{eprint:hepforge}
```

Define bibstrings for reference names.

```
\NewBibliographyString{refname}
\NewBibliographyString{refsname}
\DefineBibliographyStrings{english}{%
  refname = {reference},
  refsname = {references}
}
```

`\ccite` `\Ccite` Define *clever* citation macros.

```
\DeclareCiteCommand{\ccite}{%
  \ifnum\thecitetotal=1
    \bibstring{refname}%
  \else%
    \bibstring{refsname}%
  \fi%
  \addnbspace\bibopenbracket%
  \usebibmacro{cite:init}\usebibmacro{prenote}%
}{\usebibmacro{citeindex}\usebibmacro{cite:comp}}{}{%
```

```
  \usebibmacro{cite:dump}\usebibmacro{postnote}%
  \bibclosebracket%
}

\newrobustcmd*{\Ccite}{\bibsentence\ccite}
```

</package>

B Biblatex datamodel file

<*datamodel>

collaboration
pmid
pmcid
pmc
reportnumber
protocollessurl

Define the `dbx` file containing the `hep-bibliography` datamodel.

```
\DeclareDatamodelFields[type=field, datatype=literal]{
  collaboration, pmid, pmcid, pmc,
}
\DeclareDatamodelFields[type=field, format=xsv, datatype=literal]{
  reportnumber,
}
\DeclareDatamodelFields[type=field, datatype=uri]{protocollessurl}
\DeclareDatamodelEntryfields{
  collaboration, pmid, pmcid, pmc, reportnumber, protocollessurl,
}
```

</datamodel>

C Test

<*test>

```
\documentclass[twocolumn,a4paper]{article}

\usepackage{hep-bibliography}

\begin{filecontents}{\jobname.bib}
@article{Ade:2015xua,
    author = "Ade, P. A. R. and others",
    collaboration = "Planck",
    title = "{Planck 2015 results. XIII. Cosmological parameters}",
    eprint = "1502.01589",
    archivePrefix = "arXiv",
    primaryClass = "astro-ph.CO",
    doi = "10.1051/0004-6361/201525830",
    journal = "Astron. Astrophys.",
    volume = "594",
    pages = "A13",
    year = "2016"
}

```

```
@article{Agashe:2014kda,
    author = "Olive, K. A. and others",
    collaboration = "Particle Data Group",
    title = "{Review of Particle Physics}",
    doi = "10.1088/1674-1137/38/9/090001",
    journal = "Chin. Phys. C",
    volume = "38",
    pages = "090001",
    year = "2014"
}

@article{Ade:2013zuv,
    author = "Ade, P. A. R. and others",
    collaboration = "Planck",
    title = "{Planck 2013 results. XVI. Cosmological parameters}",
    eprint = "1303.5076",
    archivePrefix = "arXiv",
    primaryClass = "astro-ph.CO",
    reportNumber = "CERN-PH-TH-2013-129",
    doi = "10.1051/0004-6361/201321591",
    journal = "Astron. Astrophys.",
    volume = "571",
    pages = "A16",
    year = "2014"
}

@article{Aad:2012tfa,
    author = "Aad, Georges and others",
    collaboration = "ATLAS",
    title = "{Observation of a new particle in the search for
    the Standard Model Higgs boson with the ATLAS detector at the LHC}",
    eprint = "1207.7214",
    archivePrefix = "arXiv",
    primaryClass = "hep-ex",
    reportNumber = "CERN-PH-EP-2012-218",
    doi = "10.1016/j.physletb.2012.08.020",
    journal = "Phys. Lett. B",
    volume = "716",
    pages = "1--29",
    year = "2012"
}

@article{Chatrchyan:2012ufa,
    author = "Chatrchyan, Serguei and others",
    collaboration = "CMS",
    title = "{Observation of a New Boson at a Mass of 125 GeV with the
    CMS Experiment at the LHC}",
    eprint = "1207.7235",
    archivePrefix = "arXiv",
    primaryClass = "hep-ex",
```

```
    reportNumber = "CMS-HIG-12-028, CERN-PH-EP-2012-220",
    doi = "10.1016/j.physletb.2012.08.021",
    journal = "Phys. Lett. B",
    volume = "716",
    pages = "30--61",
    year = "2012"
}

@article{Beringer:1900zz,
    author = "Beringer, J. and others",
    collaboration = "Particle Data Group",
    title = "{Review of Particle Physics (RPP)}",
    reportNumber = "SLAC-REPRINT-2014-001",
    doi = "10.1103/PhysRevD.86.010001",
    journal = "Phys. Rev. D",
    volume = "86",
    pages = "010001",
    year = "2012"
}

@article{Chatrchyan:2008aa,
    author = "Chatrchyan, S. and others",
    collaboration = "CMS",
    title = "{The CMS Experiment at the CERN LHC}",
    doi = "10.1088/1748-0221/3/08/S08004",
    journal = "JINST",
    volume = "3",
    pages = "S08004",
    year = "2008"
}

@article{Cacciari:2008gp,
    author = "Cacciari, Matteo and Salam, Gavin P. and Soyez, Gregory",
    title = "{The anti-$k_t$ jet clustering algorithm}",
    eprint = "0802.1189",
    archivePrefix = "arXiv",
    primaryClass = "hep-ph",
    reportNumber = "LPTHE-07-03",
    doi = "10.1088/1126-6708/2008/04/063",
    journal = "JHEP",
    volume = "04",
    pages = "063",
    year = "2008"
}

@article{Aad:2008zzm,
    author = "Aad, G. and others",
    collaboration = "ATLAS",
    title = "{The ATLAS Experiment at the CERN Large Hadron Collider}",
    doi = "10.1088/1748-0221/3/08/S08003",
```

```
    journal = "JINST",
    volume = "3",
    pages = "S08003",
    year = "2008"
}

@article{Sjostrand:2006za,
    author = "Sjostrand, Torbjorn and Mrenna, Stephen
    and Skands, Peter Z.",
    title = "{PYTHIA 6.4 Physics and Manual}",
    eprint = "hep-ph/0603175",
    archivePrefix = "arXiv",
    reportNumber = "FERMILAB-PUB-06-052-CD-T, LU-TP-06-13",
    doi = "10.1088/1126-6708/2006/05/026",
    journal = "JHEP",
    volume = "05",
    pages = "026",
    year = "2006"
}

@article{Spergel:2003cb,
    author = "Spergel, D. N. and others",
    collaboration = "WMAP",
    title = "{First year Wilkinson Microwave Anisotropy Probe (WMAP)
    observations: Determination of cosmological parameters}",
    eprint = "astro-ph/0302209",
    archivePrefix = "arXiv",
    doi = "10.1086/377226",
    journal = "Astrophys. J. Suppl.",
    volume = "148",
    pages = "175--194",
    year = "2003"
}

@article{Agostinelli:2002hh,
    author = "Agostinelli, S. and others",
    collaboration = "GEANT4",
    title = "{GEANT4--a simulation toolkit}",
    reportNumber = "SLAC-PUB-9350, FERMILAB-PUB-03-339,
    CERN-IT-2002-003",
    doi = "10.1016/S0168-9002(03)01368-8",
    journal = "Nucl. Instrum. Meth. A",
    volume = "506",
    pages = "250--303",
    year = "2003"
}

@article{Randall:1999ee,
    author = "Randall, Lisa and Sundrum, Raman",
    title = "{A Large mass hierarchy from a small extra dimension}",
```

```
413     eprint = "hep-ph/9905221",
414     archivePrefix = "arXiv",
415     reportNumber = "MIT-CTP-2860, PUPT-1860, BUHEP-99-9",
416     doi = "10.1103/PhysRevLett.83.3370",
417     journal = "Phys. Rev. Lett.",
418     volume = "83",
419     pages = "3370--3373",
420     year = "1999"
421 }
422
423 @article{Perlmutter:1998np,
424     author = "Perlmutter, S. and others",
425     collaboration = "Supernova Cosmology Project",
426     title = "{Measurements of $\Omega$ and $\Lambda$ from 42 high
427     redshift supernovae}",
428     eprint = "astro-ph/9812133",
429     archivePrefix = "arXiv",
430     reportNumber = "LBNL-41801, LBL-41801",
431     doi = "10.1086/307221",
432     journal = "Astrophys. J.",
433     volume = "517",
434     pages = "565--586",
435     year = "1999"
436 }
437
438 @article{Riess:1998cb,
439     author = "Riess, Adam G. and others",
440     collaboration = "Supernova Search Team",
441     title = "{Observational evidence from supernovae for an accelerating
442     universe and a cosmological constant}",
443     eprint = "astro-ph/9805201",
444     archivePrefix = "arXiv",
445     doi = "10.1086/300499",
446     journal = "Astron. J.",
447     volume = "116",
448     pages = "1009--1038",
449     year = "1998"
450 }
451
452 @article{Witten:1998qj,
453     author = "Witten, Edward",
454     title = "{Anti-de Sitter space and holography}",
455     eprint = "hep-th/9802150",
456     archivePrefix = "arXiv",
457     reportNumber = "IASSNS-HEP-98-15",
458     doi = "10.4310/ATMP.1998.v2.n2.a2",
459     journal = "Adv. Theor. Math. Phys.",
460     volume = "2",
461     pages = "253--291",
462     year = "1998"
```

```
}

@article{Gubser:1998bc,
    author = "Gubser, S. S. and Klebanov, Igor R.
    and Polyakov, Alexander M.",
    title = "{Gauge theory correlators from noncritical string theory}",
    eprint = "hep-th/9802109",
    archivePrefix = "arXiv",
    reportNumber = "PUPT-1767",
    doi = "10.1016/S0370-2693(98)00377-3",
    journal = "Phys. Lett. B",
    volume = "428",
    pages = "105--114",
    year = "1998"
}

@article{Maldacena:1997re,
    author = "Maldacena, Juan Martin",
    title = "{The Large N limit of superconformal field
    theories and supergravity}",
    eprint = "hep-th/9711200",
    archivePrefix = "arXiv",
    reportNumber = "HUTP-97-A097, HUTP-98-A097",
    doi = "10.1023/A:1026654312961",
    journal = "Adv. Theor. Math. Phys.",
    volume = "2",
    pages = "231--252",
    year = "1998"
}

@article{Schlegel:1997yv,
    author = "Schlegel, David J. and Finkbeiner, Douglas P.
    and Davis, Marc",
    title = "{Maps of dust IR emission for use in estimation
    of reddening and CMBR foregrounds}",
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517     year = "1981"
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522     title = "{Asymptotic Freedom in Parton Language}",
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526     volume = "126",
527     pages = "298--318",
528     year = "1977"
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531 @article{Hawking:1974sw,
532     author = "Hawking, S. W.",
533     editor = "Gibbons, G. W. and Hawking, S. W.",
534     title = "{Particle Creation by Black Holes}",
535     doi = "10.1007/BF02345020",
536     journal = "Commun. Math. Phys.",
537     volume = "43",
538     pages = "199--220",
539     year = "1975",
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545     author = "Kobayashi, Makoto and Maskawa, Toshihide",
546     title = "{CP Violation in the Renormalizable Theory of
547     Weak Interaction}",
548     reportNumber = "KUNS-242",
549     doi = "10.1143/PTP.49.652",
550     journal = "Prog. Theor. Phys.",
551     volume = "49",
552     pages = "652--657",
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556 @article{Weinberg:1967tq,
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558     title = "{A Model of Leptons}",
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561     volume = "19",
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    pages = "579--588",
    year = "1961"
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D Readme

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```
# The ‘hep-bibliography‘ package

Bibliographies for high energy physics

## Introduction

The ‘hep-bibliography‘ package extends the ‘biblatex‘ package with some
functionality mostly useful for high energy physics. In particular it
makes full use of all ‘bibtex‘ fields provided by ‘inspirehep.net‘.

The package can be loaded via ‘\usepackage{hep-bibliography}‘.

## Author

Jan Hajer
```

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

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References

[1] P. Lehman, J. Wright, A. Boruvka, and P. Kime. ‘The `biblatex` Package: Sophisticated Bibliographies in LaTeX’ (2006). CTAN: `biblatex`. GitHub: `plk/biblatex`.

[2] F. Charette and P. Kime. ‘biber: Backend processor for BibLaTeX’ (2009). GitHub: `plk/biber`. SourceForge: `biblatex-biber`.

[3] H. Oberdiek. ‘The `kvoptions` package: Key value format for package options’ (2004). CTAN: `kvoptions`. GitHub: `ho-tex/kvoptions`.

[4] *LaTeX3 Project*. ‘The `xparse` package: A generic document command parser’ (1999). CTAN: `xparse`.

[5] D. Arseneau and M. Swift. ‘The `relsize` package: Set the font size relative to the current font size’ (2011). CTAN: `relsize`.