



Federico Cantini <federico.cantini@lib4ri.ch>

Getting started with \LaTeX Managing the Bibliography



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- `\thebibliography` environment
- `BIBTEX` (`LATEX` default bibliography management system)
- `BIBLATEX` package (with *biber* as backend)

`\thebibliography` environment

```
\begin{thebibliography}
    \bibitem{label1} item 1
    \bibitem{label2} item 2
\end{thebibliography}

\cite{label}
```

To cite **properly** while making easy to **switch between citation styles** and **keeping the bibliographic data centralized**.

BIB_TE_X and BIBL_AT_EX let you

- keep one (structured!) file with bibliographic data for all your publications
- cite independently of citation styles (default, additional packages, defined by the publisher, self defined)

BIB_TE_X and BIBL_AT_EX deal properly with

- different document types (books, articles, conference proceedings, theses, etc...)
- special characters (coded in L_AT_EX)

```
@type{label,  
  field 1 = {value 1},  
  ...  
  field n = {value n},  
}
```

- *type*: article, book, booklet, conference, inbook, incollection, inproceedings, manual, masterthesis, misc, phdthesis, proceedings, techreport, unpublished
- *label* is any label (to use with `\cite{label}`)
- *field i*: address, annote, author, booktitle, chapter, crossref, edition, editor, howpublished, institution, journal, key, month, note, number, organization, pages, publisher, school, series, title, type, volume, year

- Depending on *type*, some *fields* are required, others are optional, yet others are ignored
- No comment character in bib files

```
@book{knuth1986,  
  author = {Knuth, Donald Ervin},  
  title = {The \textrm{\TeX}book},  
  series = {Computers & Typesetting},  
  volume = {{A}},  
  year = {1986},  
  publisher = {Addison-Wesley},  
  isbn = {978-0-201-13447-6},  
}  
@book{lampport1994,  
  author = {Lampport, Leslie},  
  title = {\textrm{\LaTeX}: A Document Preparati  
  edition = {2nd},  
  year = {1994},  
  publisher = {Addison-Wesley},  
  isbn = {978-0-201-52983-8},  
}  
@article{patashnik1994,  
  author = {Patashnik, Oren},  
  title = {\textrm{Bib\TeX} 1.0},  
  journal = {{TUG}boat},  
  year = {1994},  
  volume = {15},  
  number = {3},  
  pages = {269--273},  
}
```


- Add `\usepackage[options]{biblatex}` in the preamble
 - *options*: style, sorting...
- Add `\addbibresource[options]{bibfile}` in the preamble
 - *options*: bibencoding, label...
- Use `\cite[pre][post]{label}` in the text
 - *pre*: a string before the citation, *post*: a string after the citation
 - Additional commands: `\footcite`, `\parencite`, `\nocite`
- Add `\printbibliography[options]` where you want the bibliography
 - *options*: type, nottype, title={*title*}

```
\documentclass[a4paper]{article}

\usepackage[style=ieee]{biblatex}
\addbibresource{bibliography.bib}

\begin{document}
  In \cite{patashnik1994}, the author discusses the
  history of \textsc{Bib\TeX} and depicts his future plans
  for version~1.0.

  \printbibliography
\end{document}
```

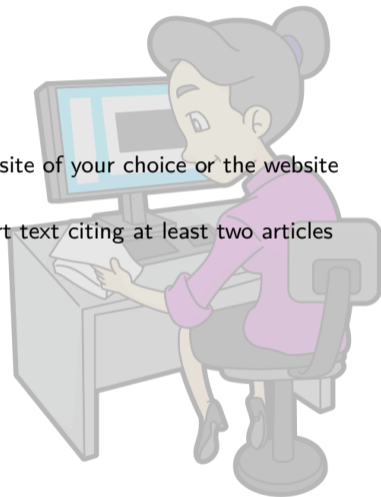
In [1], the author discusses the history of Bib \TeX and depicts his future plans for version 1.0.

References

- [1] O. Patashnik, “Bib \TeX 1.0,” *TUGboat*, vol. 15, no. 3, pp. 269–273, 1994.

- Running `*latex` stores the BIBL_AT_EX-relevant data in the `aux` file
- Running `biber` reads the `aux` file and stores the bibliography in the `bbl` file
- Running `*latex` reads the bibliography from the `bbl` file and stores the citations in the `aux` file
- Running `*latex` again resolves the references by reading the `\bibcite` entries from the `aux` file

- Build your own bib file using *Google Scholar*, a publisher website of your choice or the website <https://doi2bib.org/>
- Using the file `Exercise_4/ex_4.pdf` as example, write a short text citing at least two articles (or books).
- Try different citation styles.



Federico Cantini

T +41 58 765 6847 federico.cantini@lib4ri.ch

Frank Hösli

T +41 58 765 6833 frank.hoesli@lib4ri.ch

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