////Lib4RI

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Getting started with LATEX

Managing the Bibliography



Introduction

- \thebibliography environment
- BibTeX (IPTeX default bibliography management system)
- BIBIATEX package (with biber as backend)



\thebibliography environment

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



BibT_EX & BibL⁴T_EX Aim

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





BibT_EX & Bib I[∆]T_EX How they work

BIBTEX and BIBLATEX let you

- o 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)

$BibT_EX$ and $BibBT_EX$ deal properly with

- o different document types (books, articles, conference proceedings, theses, etc...)
- \circ special characters (coded in \LaTeX)



BiBI₄TEX The bib-file

```
@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conference, inbook, incollection, inproceedings, manual, masterthesis, misc, phdthesis, proceedings, techreport, unpublished
- o 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





BIBLATEX The pip-lile

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





The bib-file

```
@book{knuth1986,
    author = {Knuth, Donald Ervin},
    title = {The \textrm{\TeX}book},
    series = {Computers & Typesetting},
    volume = \{\{A\}\}.
    vear = \{1986\},\
    publisher = {Addison-Weslev}.
    isbn = \{978-0-201-13447-6\},
@book{lamport1994,
    author = {Lamport, Leslie},
    title = {\textrm{\LaTeX}: A Document Preparati
    edition = \{2nd\}.
    vear = \{1994\}.
    publisher = {Addison-Wesley}.
    isbn = \{978-0-201-52983-8\}.
@article{patashnik1994.
    author = {Patashnik, Oren},
    title = {\textrm{Bib\TeX} 1.0}.
    journal = {{TUG}boat},
    vear = \{1994\}.
    volume = {15}.
    number = \{3\}.
    pages = \{269 - -273\}.
```

_{Вів⊮ТЕ}Х How to cite

- $\hspace{0.1in} \circ \hspace{0.1in} \mathsf{Add} \hspace{0.1in} \setminus \mathtt{usepackage} \hspace{0.1in} [\mathit{options}] \hspace{0.1in} \{\mathtt{biblatex}\} \hspace{0.1in} \mathsf{in} \hspace{0.1in} \mathsf{the} \hspace{0.1in} \mathsf{preamble} \\$
 - o options: style, sorting...
- \circ Add $\addbibresource[options]{bibfile}$ in the preamble
 - options: bibencoding, label...
- Use $\cite[pre][post]{label}$ in the text
 - o 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}





BIBLATEX How to cite

```
\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 BibTeX and depicts his future plans for version 1.0.

References

1] O. Patashnik, "BibTEX 1.0," *TUGboat*, vol. 15, no. 3, pp. 269–273, 1994.





ВівЫТ_ЕХ

- Running *latex stores the $\mathrm{Bib} ET_EX$ -relevant data in the aux file
- Running biber reads the aux file and stores the bibliography in the bbl file
- o 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





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- 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.





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