Collegio Alessandro Volta Via Adolfo Ferrata, 17, Pavia (PV)





Lecture 6 - Bibliography, References & Special Documents

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Bibliography Management

- There are three main options in LaTeX:
 - bibtex;
 - natbib;
 - biblatex.
- biblatex is a modern option for processing bibliography information, provides an easier and more flexible interface and a better language localization than the other two options.
- A minimal working example of the biblatex package is shown on the right.

```
\documentclass[letterpaper,10pt]{article}
\usepackage{biblatex} %Imports biblatex package
\addbibresource{sample.bib} %Import the bibliography file
\begin{document}
Let's cite! Einstein's journal paper \cite{einstein} and
```

\printbibliography %Prints bibliography

book \cite{dirac} are physics-related items.

\end{document}

Dirac's

Let's cite! Einstein's journal paper [2] and Dirac's book [1] are physics-related items.

References

- [1] Paul Adrien Maurice Dirac. The Principles of Quantum Mechanics. International series of monographs on physics. Clarendon Press, 1981. ISBN: 9780198520115.
- [2] Albert Einstein. "Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]". In: *Annalen der Physik* 322.10 (1905), pp. 891–921. DOI: http://dx.doi.org/10.1002/andp.19053221004.

Try it by yourself

```
\documentclass{article}
\usepackage[backend=biber,style=alphabetic,sorting=ynt]{biblatex}
\addbibresource{sample.bib}
\title{Bibliography management: \texttt{biblatex} package}
\author{Overleaf}
\date{ }
\begin{document}
\maketitle
Using \texttfbiblatex} you can display a bibliography divided
into sections, depending on citation type. Let's cite! Einstein's
journal paper \cite{einstein} and Dirac's book \cite{dirac} are
physics-related items. Next, \textit{The \LaTeX\ Companion} book
 \cite{latexcompanion{, Donald Knuth's website \cite{knuthwebsite},
\textit{The Comprehensive Tex Archive Network} (CTAN)
\cite{ctan} are \LaTeX-related items; but the others, Donald Knuth's items,
\cite{knuth-fa,knuth-acp} are dedicated to programming.
\medskip
\printbibliography
\end{document}
```

Using biblatex you can display a bibliography divided into sections, depending on citation type. Let's cite! Einstein's journal paper [Ein05] and Dirac's book [Dir81] are physics-related items. Next, The LATEX Companion book [GMS93], Donald Knuth's website [Knu], The Comprehensive Tex Archive Network (CTAN) [Gre93] are LATEX-related items; but the others, Donald Knuth's items, [Knu73; Knu68] are dedicated to programming.

References

- [Ein05] Albert Einstein. "Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]". In: *Annalen der Physik* 322.10 (1905), pp. 891–921. DOI: http://dx.doi.org/10.1002/andp.19053221004.
- [Knu68] Donald E. Knuth. The Art of Computer Programming. Four volumes. Seven volumes planned. Addison-Wesley, 1968.
- [Knu73] Donald E. Knuth. "Fundamental Algorithms". In: Addison-Wesley, 1973. Chap. 1.2.
- [Dir81] Paul Adrien Maurice Dirac. The Principles of Quantum Mechanics. International series of monographs on physics. Clarendon Press, 1981. ISBN: 9780198520115.
- [GMS93] Michel Goossens, Frank Mittelbach, and Alexander Samarin. The Language Transfer Matter Matter Samarin. The Language Matter Matter
- [Gre93] George D. Greenwade. "The Comprehensive Tex Archive Network (CTAN)". In: TUGBoat 14.3 (1993), pp. 342–351.
- [Knu] Donald Knuth. Knuth: Computers and Typesetting. URL: http://www-cs-faculty.stanford.edu/~uno/abcde.html. (accessed: 01.09.2016).

The Bibliography file

```
@article{einstein,
    author = "Albert Einstein",
    title = "{Zur Elektrodynamik bewegter K{\"o}rper}.
({German})
    [{On} the electrodynamics of moving bodies]",
    journal = "Annalen der Physik",
    volume = "322",
    number = "10",
    pages = "891 - 921",
    year = "1905",
    DOI = "http://dx.doi.org/10.1002/andp.19053221004",
    keywords = "physics"
@book{dirac,
    title = {The Principles of Quantum Mechanics},
    author = {Paul Adrien Maurice Dirac},
    isbn = {9780198520115},
    series = {International series of monographs on
physics},
    year = \{1981\},
    publisher = {Clarendon Press},
    keywords = {physics}
```

```
@online{knuthwebsite,
    author = "Donald Knuth",
    title = "Knuth: Computers and Typesetting",
    url = "http://www-cs-
faculty.stanford.edu/~uno/abcde.html",
    addendum = "(accessed: 01.09.2016)",
    keywords = "latex,knuth"
}

@inbook{knuth-fa,
    author = "Donald E. Knuth",
    title = "Fundamental Algorithms",
    publisher = "Addison-Wesley",
    year = "1973",
    chapter = "1.2",
    keywords = "knuth,programming"
}
```

Customizing the bibliography

```
\documentclass{article}
\usepackage[backend=biber,style=alphabetic,sorting=ynt]{biblatex}
\addbibresource{sample.bib}
\title{Bibliography management: \texttt{biblatex} package}
\author{Overleaf}
\date{May 2021}
\begin{document}
\maketitle
Using \texttt{biblatex} you can display a bibliography divided into
sections,
depending on citation type. Let's cite! Einstein's journal paper
\cite{einstein}
and Dirac's book \cite{dirac} are physics-related items. Next,
\textit{The \LaTeX\ Companion}
book \cite{latexcompanion}, Donald Knuth's website
\cite{knuthwebsite},
\textit{The Comprehensive Tex Archive Network} (CTAN) \cite{ctan}
\LaTeX-related items; but the others, Donald Knuth's items,
\cite{knuth-fa,knuth-acp} are dedicated to programming.
\medskip
\printbibliography[title={Whole bibliography}]
```

Whole bibliography

[Ein05]	Albert Einstein. "Zur Elektrodynamik ber [On the electrodynamics of moving bodies] 322.10 (1905), pp. 891–921. DOI: http://andp.19053221004.

- [Knu68] Donald E. Knuth. The Art of Computer Pro-Seven volumes planned. Addison-Wesley, 1
- [Knu73] Donald E. Knuth. "Fundamental Algorith 1973. Chap. 1.2.
- [Dir81] Paul Adrien Maurice Dirac. The Princip ics. International series of monographs on 1981. ISBN: 9780198520115.
- [GMS93] Michel Goossens, Frank Mittelbach, and \LaTeX Companion. Reading, Massachusetts
- [Gre93] George D. Greenwade. "The Comprehens (CTAN)". In: *TUGBoat* 14.3 (1993), pp. 3
- [Knu] Donald Knuth. Knuth: Computers and Tawww-cs-faculty.stanford.edu/~uno.01.09.2016).

Customizing the bibliography

\printbibliography[type=article,title={Articles only}]
\printbibliography[type=book,title={Books only}]

\printbibliography[keyword={physics},title={Physics-related only}]
\printbibliography[keyword={latex},title={\LaTeX-related only}]

Articles only

- [Ein05] Albert Einstein. "Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]". In: *Annalen der Physik* 322.10 (1905), pp. 891–921. DOI: http://dx.doi.org/10.1002/andp.19053221004.
- [Gre93] George D. Greenwade. "The Comprehensive Tex Archive Network (CTAN)". In: *TUGBoat* 14.3 (1993), pp. 342–351.

Books only

- [Knu68] Donald E. Knuth. The Art of Computer Programming. Four volumes. Seven volumes planned. Addison-Wesley, 1968.
- [Dir81] Paul Adrien Maurice Dirac. The Principles of Quantum Mechanics. International series of monographs on physics. Clarendon Press, 1981. ISBN: 9780198520115.
- [GMS93] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LATEX Companion*. Reading, Massachusetts: Addison-Wesley, 1993.

Adding the bibliography to the ToC

```
\printbibliography[
heading=bibintoc,
title={Whole bibliography}
```

\printbibliography[heading=subbibintoc,type=article,title={Articles only}]

Special documents

- LaTeX is the best tool for writing professional scientific articles, thesis, letters, academic journals, CVs, ...
- In the following slides we will see:
 - Academic Journals;
 - Thesis:
 - Letters:
 - Presentations:
 - Scientific Reports;
 - CVs & Resumes.

Algorithm

Algorithm

Algorithm, implementing Andersen's context-insensitive ponts-to analysis. constructs a flow graph G representing the pointer flow for a program.

G has nodes for variables, abstract locations, and field of abstract locations.

G has an edge $n \to n'$ iff one of the following two conditions holds:

- 1. n is an abstract location o_i representing a statement x = new T(), and n' is x.
- 2. $pt(n) \subseteq pt(n')$ according to some rule.







WHO AM I?

Lorem insum dolor sit amet consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetu adipiscing elit. Donec a diam lectus.





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I help... Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec

Academic Journals

AASTeX Template for submissions to AAS Journals (ApJ-AJ-ApJS-ApJL-PSJ-RNAAS) Official

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Author American Astronomical Society

Last Updated 6 months ago

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Abstract The American Astronomical Society (AAS) has developed a

markup package to assist authors in preparing

manuscripts intended for submission to all the AAS-affiliated journals. The journals are the Astrophysical

Journal (ApJ), the Astronomical Journal (AJ), ApJ

Supplements (ApJS), Letters (ApJL), The Planetary Science

Journal (PSJ), and Research Notes of the American

Astronomical society (RNAAS). The latest LaTeX classfile is

AASTeX v6.3.1 and it can be obtained here. The

sample631.tex template uses this classfile to illustrate

Draft version June 2, 2022 Typeset using IATEX default style in AASTeX631

Template AASTEXArticle with Examples: v6.3.1

GREG J. SCHWARZ , AUGUST MUENCH,
(AAS JOURNALS DATA EDITORS)

F.X Timmes,2,3 Amy Hendrickson,4,1 Julie Steffen,5,1

¹American Astronomical Society 1667 K Street NW, Suate 800 Washington, DC 20006, USA ²Arizono State University ³AAS Journals Associate Editor-in-Chief ⁴TeXnology Inc. ⁵AAS Director of Publishing

ABSTRACT

This example manuscript is intended to serve as a tutorial and template for authors to use when writing their own AAS Journal articles. The manuscript includes a history of AASTgX and includes figure and table examples to illustrate these features. Information on features not explicitly mentioned in the article can be viewed in the manuscript comments or more extensive online documentation. Authors are welcome replace the text, tables, figures, and bibliography with their own and submit the resulting manuscript to the AAS Journals peer review system. The first lesson in the tutorial is to remind authors that the AAS Journals, the Astrophysical Journal (ApJ), the Astrophysical Journal Letters (ApJL), the Astronomical Journal (AJ), and the Planetary Science Journal (PSJ) all have a 250 word limit for the abstract²⁰. If you exceed this length the Editorial office will ask you to shorten it. This abstract has 161 words.

Keywords: Classical Novae (251) — Ultraviolet astronomy(1736) — History of astronomy(1868) — Interdisciplinary astronomy(804)

1 INTRODUCTION

LaTeX ¹ is a document markup language that is particularly well suited for the publication of mathematical and scientific articles (Lamport 1994). LaTeX was written in 1985 by Leslie Lamport who based it on the TeX typesetting language which itself was created by Donald E. Knuth in 1978. In 1988 a suite of LaTeX macros were developed to investigate electronic submission and publication of AAS Journal articles (Hanisch & Biemesderfer 1989). Shortly afterwards, Chris Biemesdefer merged these macros and more into a LaTeX 2.08 style file called AASTeX. These early AASTeX versions introduced many common commands and practices that authors take for granted today. Substantial revisions were made by Lee Brotzman and Pierre Landau when the package was updated to v4.0. AASTeX v5.0, written in 1995 by Arthur Ogawa, upgraded to LaTeX 2e which uses the document class in lieu of a style file. Other improvements to version 5 included hypertext support, landscape deluxetables and improved figure support to facilitate electronic submission. AASTeX v5.2 was released in 2005 and introduced additional graphics support plus new mark up to identifier astronomical objects, datasets and facilities.

In 1996 Maxim Markevitch modified the AAS preprint style file, aaspp4.sty, to closely emulate the very tight, two column style of a typeset Astrophysical Journal article. The result was emulateapj.sty. A year later Alexey Vikhlinin

Thesis

Computer Engineering MsC Thesis - UniPD

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Author Luca Martinelli

Last Updated 6 months ago

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Abstract Computer Engineering MsC Template for University of

Padua.

Tags

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Thesis

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An interesting title for the thesis

MASTER CANDIDATE

Luca Martinelli

Student ID 1518036

SUPERVISOR

Prof. Tim Berners-Lee University of Padova

Co-supervisor

Dott. Robert Kahn University of Princeton

Letters

BNU Letter of Recommendation

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Zain Chen Author Last Updated 24 days ago

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Template by Brian Wood (brian.wood@oregonstate.edu). Abstract

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on the HIT version modified by MincooLee

(mincoolee@gmail.com).

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No.19, Xinjiekouwai Street, Haidian District,

Beijing, China, 100875 Phone: 86-xxxx-xxxxxxxx

E-mail: xxx@bnu.edu.cn

URL: http://homepage.hit.edu.cn/XXX

November 22, 2022

Some University Some Addresss

SomeTown, SomeState SomeZip

Dear Application Committee,

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbitristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metusrhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget semvel leo ultrices bibendum. Aenean faucibus, Morbi dolor nulla, malesuada eu, pulvinar at, mollisac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem nonjusto. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada portitor diam. Donec felis erat, conque non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Presentations

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Author Jérôme Belleman

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Preliminary draft 17:07 28 March 2018

28 March 2018

author.email@cern.ch

CERN ATS Note title

Author Name

CERN, CH-1211 Geneva, Switzerland

Keywords: Bending Magnet, path length, pole face angle, beam trajectory, survey, GEODE

Summary

This document shows how to calculate the path-length of rectangular bending magnets in a beam line. The path-length depends on the pole-face angles, i.e. how the magnet is positioned in the line. The majority of bending magnets are installed with identical pole-face angles at the start and the end, but in certain cases the pole-face angles are different e.g. in the CERN PS BOOSTER BTP and BTY extraction lines, the BHZ10 magnet have a special positioning in order not to perturb the optics of any of the lines unfavorably. The path-length correspond to the s-parameter in MADX, and must be calculated precisely, in order to get a correct survey, which need to be correct to the 10 micron level.

Contents

1	Introduction	2
	How to position a straight vacuum chamber to maximize aperture for the eam	4
3	Three layouts for a rectangular magnet	
	3.1 The standard magnet layout	5
	3.2 Rectangular hending magnet with zero pole phase angle at ENTRE.	6

Book Covers

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Author Tibor Tómács Last Updated 2 years ago

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- 31/01/1970 (Earth, Solar System)
- Mars, Solar System
- ceskergabbro@globemail.com
- ceskergabbro.com
- m www.linkedin.com/in/ceskergabbro
- o github.com/ceskergabbro

My name is Clio Esker Gabbro. I am a space explorer with experience on Mars. My current ambition is to conduct further research on awareness during time loops. Very importantly, I do not lie on résumés. In my free time, I enjoy formulating jokes and puns and roasting vegan marshmallows.

EDUCATION

PhD Irrelevant Science of Jokes

Perfected the fine art of species-inclusive interplanetary entertainment, a.k.a. PC jokes Institute of PlutoTech (remote) •

2013 - 2017

MSc Cheap Space Entertainment

Learned how to make low-quality space movies, and how to sell them as refined content Lunar University of Technology Q

2010 - 2012

WORK EXPERIENCE

Mars explorer

Mostly playing with Mars rovers to search for the remains of an ancient society

- Mars (Solar System)
- Movember 2017 present

Personal portable heater

Hired on demand by those who happened to feel cold during the day and could use a hug too

- · All over Earth
- # June 2008 March 2010

SELECTED PUBLICATIONS

Looking for Water on Mars

- C. Esker Gabbro et al. .
- Journal of ambitious hobby projects (2012)

DOI: 12.3456/1234567.1234567 @

Life on Mars: All You Need Is a Twix

SKILLS & LANGUAGES

Computer

- OOO Python++
- OOO DeRust O JavaSharp OO Macrohard

Other tools



"Is it better to be feared or respected?" I say, is it too much to ask for both? I prefer the weapon you only have to fire once. For your consideration... \LaTeX