Programming LaTeX — A survey of documentation and packages

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Abstract

A survey of documentation for LaTeX. Included are references to printed and electronic books and manuals, symbol lists, FAQs, the LaTeX source code, CTAN and distributions, programming-related packages, users groups and online communities, and information on creating packages and documentation.

Contents

Introduction

Reinventing the wheel may be useful if you think that you can do it better. Worse, though, is not even being aware that the wheel has already been invented in the first place, which can be an embarrassing waste of time. Such can be the case both for a new LaTeX programmer who isn't aware of the many ways

things may be done, but also for someone, this author included, who learned LaTeX many years ago but may have missed some of the recent advancements in package code and documentation.

A wealth of information is available, not only in print and online, but also directly embedded in the typical LaTeX distribution. The following is meant to be a broad overview of some of today's resources for LaTeX programmers.

In some cases the same document may be listed in several categories. For example, a graphics FAQ also available in French may be listed under graphics, FAQs, and also French documents.

Many older documents are not included.

(The latest version of this document is available as the LaTeX docsurvey package.)

Printed books

Even in an electronic/online era, printed books still have the advantage of being able to be opened for reference without taking up space on the screen. Printed books also provide extended discussion of useful topics, have extensive human-edited indexes which are more useful than a simple document-wide search function, and some are also available in electronic format.

TeX FAQ

TeX FAQ. URL: https://texfaq.org/.

An online resource, which includes a detailed list of printed books.

More Math Into LaTeX — Grätzer

George Grätzer. *More Math Into LaTeX*. 5th ed. Springer, 2016. ISBN: 978-3-319-23795-4. URL: https://www.springer.com/gp/book/9783319237954.

Updated edition.

Guide to LaTeX — Kopka et al.

Helmut Kopka and Patrick W. Daly. *Guide to LaTeX*. 4th ed. Addison-Wesley Professional, 2004. 597 pp. ISBN: 0-321-17385-6. URL: https://www.pearson.com/us/higher-education/program/Kopka-Guide-to-La-Te-X-4th-Edition/PGM156755.html.

An introduction and more advanced material, including an extensive reference guide.

LaTeX Beginner's Guide — Kottwitz

Stefan Kottwitz. *LaTeX Beginner's Guide*. Packt Publishing, 2011. ISBN: 1847199860. URL: https://www.packtpub.com/product/latex-beginner-s-guide/9781847199867.

An overview with numerous examples.

LaTeX Cookbook — Kottwitz

Stefan Kottwitz. *LaTeX Cookbook*. Packt Publishing, 2015. ISBN: 978-1-784-39514-8. URL: http://latex-cookbook.net.

More examples.

LaTeX: A Document Preparation System **Lamport**

Leslie Lamport. *LaTeX: A Document Preparation System*. 2nd ed. Addison Wesley Professional, 1994. 272 pp. ISBN: 0-201-52983-1. URL: https://www.pearson.com/us/higher-education/program/Lamport-La-Te-X-A-Document-Preparation-System-2nd-Edition/PGM159713.html.

The classic introduction to LaTeX, in continuous reprint for decades.

The LaTeX Companion **Mittelbach et al.**

Frank Mittelbach et al. *The LaTeX Companion*. 2nd ed. Addison-Wesley, 2004. 1090 pp. ISBN: 0-201-36299-6. URL: http://www.informit.com/store/latex-companion-9780133387667.

Provides extended discussion and examples of the inner workings of LaTeX and numerous useful packages.

Books about TeX, typography, and friends **TeX Users Group**

TeX Users Group. *Books about TeX, typography, and friends*. URL: http://tug.org/books/.

TeX Users Group book store, with reviews. Includes more than 75 books. Categories: published by TUG, by Donald E. Knuth, about TeX and its applications, about typography and fonts, and about other related topics. Discounts for TUG members.

Presentations with LaTeX **Voß**

Herbert Voß. *Presentations with LaTeX*. Lehmanns Media GmbH, 2012. 206 pp. ISBN: 9783865414960.

PSTricks: Graphics and PostScript for TeX and LaTeX **Voß**

Herbert Voß. *PSTricks: Graphics and PostScript for TeX and LaTeX*. UIT Cambridge, 2011. ISBN: 978-1-906-86013-4. URL: https://www.uit.co.uk/pstricks.

Typesetting Mathematics with LaTeX **Voß**

Herbert Voß. *Typesetting Mathematics with LaTeX*. UIT Cambridge, 2010. ISBN: 978-1-906-86017-2. URL: https://www.uit.co.uk/typesetting-mathematics-with-latex.

Typesetting Tables with LaTeX **Voß**

Herbert Voß. *Typesetting Tables with LaTeX*. UIT Cambridge, 2011. ISBN: 978-1-906-86025-7. URL: https://www.uit.co.uk/typesetting-tables-with-latex.

Books and documentation by category

Most of these are provided with the TeX distribution, and may be updated with each release. Access the embedded documentation from a command line using the `texdoc` program.

TeX

For a list of older books, see https://www.texfaq.org/FAQ-tex-books.

TeX for the Impatient — Abrahams et al.

Paul W. Abrahams, Kathryn A. Hargreaves, and Karl Berry. *TeX for the Impatient*. 2020. 393 pp. URL: https://ctan.org/pkg/impatient.

A tutorial and reference for TeX, plain TeX, and Eplain. Also available in French and Chinese. (texdoc impatient).

A Gentle Introduction to TeX — Doob

Michael Doob. *A Gentle Introduction to TeX. A Manual for Self-study*. 2002. 97 pp. URL: https://ctan.org/pkg/gentle.

A comprehensive tutorial on plain TeX. (texdoc gentle).

TeX by Topic — Eijkhout

Victor Eijkhout. *TeX by Topic. A TeXnician's Reference*. Addison-Wesley UK, 1991. 317 pp. ISBN: 0-201-56882-9. URL: http://eijkhout.net/texbytopic/texbytopic.html.

A reference for TeX. This may be useful for understanding the source code of LaTeX packages, many of which are quite old and written in low-level TeX. (texdoc texbytopic).

Wikibooks

Wikibooks. TeX. URL: https://en.wikibooks.org/wiki/TeX.

An online book about low-level TeX.

Getting Started with Plain TeX — Wilkins

D. R. Wilkins. *Getting Started with Plain TeX*. 1994. 40 pp. URL: http://www.ntg.nl/doc/wilkins/pllong.pdf.

LaTeX

LaTeX 2ε for authors — LaTeX3 Project Team

LaTeX3 Project Team. *LaTeX 2ε for authors*. 2020. 31 pp. URL: https://ctan.org/pkg/usrguide.

An overview of the new features of LaTeX 2ε compared to LaTeX2.09. (texdoc usrguide).

New LaTeX methods for authors — LaTeX3 Project Team

LaTeX3 Project Team. *New LaTeX methods for authors*. 2021. 13 pp. URL: https://www.latex-project.org/help/documentation/usrguide3.pdf.

xparse package functions now integrated into the LaTeX core. (texdoc usrguide3).

Writing Scientific Documents Using LaTeX **Bennieston**

Andrew J. Bennieston. *Writing Scientific Documents Using LaTeX*. 2009. URL: https://ctan.org/pkg/intro-scientific.

An introduction to typesetting scientific documents.

Formatting Information, A beginner's introduction to typesetting with LaTeX **Flynn**

Peter Flynn. *Formatting Information, A beginner's introduction to typesetting with LaTeX*. 2005. URL: https://ctan.org/pkg/beginlatex.

A beginner's introduction to typesetting with LaTeX.

The very short guide to typesetting with LaTeX **Flynn**

Peter Flynn. *The very short guide to typesetting with LaTeX*. 2016. URL: https://ctan.org/pkg/latex-veryshortguide.

A four-page introduction.

LaTeX 2ε: An unofficial reference manual **Greenwade et al.**

George D. Greenwade et al. *LaTeX 2ε: An unofficial reference manual*. English, French, Spanish. 246 pp. URL: https://latexref.xyz.

A thorough but concise reference manual for LaTeX 2ε, available in several languages.
(`texdoc -l latex2e-help`).

Getting something out of LaTeX **Hefferon**

Jim Hefferon. *Getting something out of LaTeX*. 2009. URL: https://ctan.org/pkg/first-latex-doc.

Create your first document in LaTeX.

Guide to LaTeX **Kopka et al.**

Helmut Kopka and Patrick W. Daly. *Guide to LaTeX*. 4th ed. Addison-Wesley Professional, 2004. 597 pp. ISBN: 0-321-17385-6. URL: https://www.pearson.com/us/higher-education/program/Kopka-Guide-to-La-Te-X-4th-Edition/PGM156755.html.

An introduction and more advanced material, including an extensive reference guide.

LaTeX Beginner's Guide **Kottwitz**

Stefan Kottwitz. *LaTeX Beginner's Guide*. Packt Publishing, 2011. ISBN: 1847199860. URL: https://www.packtpub.com/product/latex-beginner-s-guide/9781847199867.

An overview with numerous examples.

LaTeX Cookbook **Kottwitz**

Stefan Kottwitz. *LaTeX Cookbook*. Packt Publishing, 2015. ISBN: 978-1-784-39514-8. URL: http://latex-cookbook.net.

More examples.

LaTeX: A Document Preparation System **Lamport**

Leslie Lamport. *LaTeX: A Document Preparation System*. 2nd ed. Addison Wesley Professional, 1994. 272 pp. ISBN: 0-201-52983-1. URL: https://www.pearson.com/us/higher-education/program/Lamport-La-Te-X-A-Document-Preparation-System-2nd-Edition/PGM159713.html.

The classic introduction to LaTeX, in continuous reprint for decades.

Getting Started with LaTeX 2ε **Morris**

Michael P. Morris. *Getting Started with LaTeX 2ε*. 2020. 33 pp. URL: https://ctan.org/pkg/startlatex2e.

A beginner's bare-bones overview. (`texdoc startlatex2e`).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

LaTeX for Complete Novices **Talbot**

Nicola L. C. Talbot. *LaTeX for Complete Novices*. Dickimaw Books, 2012. 279 pp. URL: http://www.dickimaw-books.com.

An extensive introduction for a non-technical person. (`texdoc dickimaw-novices`).

Using LaTeX to Write a PhD Thesis **Talbot**

Nicola L. C. Talbot. *Using LaTeX to Write a PhD Thesis*. Dickimaw Books, 2013. 146 pp. URL: http://www.dickimaw-books.com.

A followup to *LaTeX for Complete Novices*, including extensive discussion about bibliographies, indexes, and glossaries. (`texdoc dickimaw-thesis`).

Wikibooks

Wikibooks. LaTeX. 2017. URL: https://en.wikibooks.org/wiki/LaTeX.

An online book, includes information about creating LaTeX packages and classes.

LuaLaTeX

LuaTeX Reference Manual — **LuaTeX development team**

LuaTeX development team. *LuaTeX Reference Manual*. 2020. 318 pp. URL: http://mirrors.ctan.org/systems/doc/luatex/luatex.pdf.

The complete reference. (texdoc luatex).

A guide to LuaLaTeX — **Pégourié-Gonnard**

Manuel Pégourié-Gonnard. *A guide to LuaLaTeX*. 2013. 14 pp. URL: https://ctan.org/pkg/lualatex-doc.

An overview, and references to related packages. (texdoc lualatex-doc).

XeLaTeX

font-change-xetex — **Dhawan**

Amit Raj Dhawan. *font-change-xetex. Macros to use OpenType and TrueType fonts with XeTeX*. 2016. 21 pp. URL: https://ctan.org/pkg/font-change-xetex.

For plain XeTeX. (texdoc font-change-xetex).

The XeTeX Companion — **Goossens et al.**

Michel Goossens et al. *The XeTeX Companion. TeX meets OpenType and Unicode*. 2010. 112 pp. URL: https://ctan.org/pkg/xetex.

Introduction to OpenType and Unicode, using OpenType fonts, handling Unicode-encoded sources.

The XeTeX reference guide — **Robertson et al.**

Will Robertson, Khaled Hosny, and Karl Berry. *The XeTeX reference guide*. 2019. 25 pp. URL: https://ctan.org/pkg/xetex.

A summary of additional features over TeX. (texdoc xetex-reference).

LaTeX3 and expl3

The LaTeX3 Interfaces — **LaTeX3 Project Team**

LaTeX3 Project Team. *The LaTeX3 Interfaces*. 2020. 310 pp. URL: https://ctan.org/pkg/l3kernel.

Reference documentation for the expl3 programming environment. (texdoc interface3).

The LaTeX3 kernel: style guide for code authors — **LaTeX3 Project Team**

LaTeX3 Project Team. *The LaTeX3 kernel: style guide for code authors*. 2020. 5 pp. URL: https://ctan.org/pkg/l3kernel.

Style guide for authors using expl3. (texdoc l3styleguide).

The expl3 package and LaTeX3 programming **LaTeX3 Project Team**

LaTeX3 Project Team. *The expl3 package and LaTeX3 programming*. 2020. 16 pp. URL: https://ctan.org/pkg/l3kernel.

Introduction to expl3. (texdoc expl3).

LaTeX3: Programming in LaTeX with Ease **Xiang**

Ziyue "Alan" Xiang. *LaTeX3: Programming in LaTeX with Ease*. URL: https://www.alanshawn.com/latex3-tutorial/.

A LaTeX3 programming tutorial.

Bibliography

Tame the BeaST **Markey**

Nicolas Markey. *Tame the BeaST. The B to X of BibTeX*. 2009. 48 pp. URL: https://ctan.org/pkg/tamethebeast/.

About bibliographies and BibTeX. (texdoc tamethebeast).

Biblatex Cheat Sheet **Rees**

Clea F. Rees. *Biblatex Cheat Sheet*. 2017. 2 pp. URL: https://ctan.org/pkg/biblatex-cheatsheet.

A tri-fold quick reference. (texdoc biblatex-cheatsheet).

Math

User's Guide for the amsmath Package **American Mathematical Society et al.**

American Mathematical Society and LaTeX3 Project Team. *User's Guide for the amsmath Package*. 2020. 44 pp. URL: https://ctan.org/pkg/amsmath.

How to use amsmath. Also see International languages for the Italian, Japanese, and Vietnamese translations. (texdoc amsmath).

Short Math Guide for LaTeX **Downes et al.**

Michael Downes and Barbara Beeton. *Short Math Guide for LaTeX*. 2017. 21 pp. URL: https://ctan.org/pkg/short-math-guide.

A summary of features in LaTeX and packages for writing math formulas. (texdoc short-math-guide).

More Math Into LaTeX **Grätzer**

George Grätzer. *More Math Into LaTeX*. 5th ed. Springer, 2016. ISBN: 978-3-319-23795-4. URL: https://www.springer.com/gp/book/9783319237954.

Updated edition.

Farbige Mathematik **Voß**

Herbert Voß. "Farbige Mathematik". German. In: *TeXnische Komödie* (2004). URL: https://ctan.org/pkg/voss-mathcol.

Math in color. In German, but with easy-to-use examples. (texdoc voss-mathcol).

Typesetting Mathematics with LaTeX **Voß**

Herbert Voß. *Typesetting Mathematics with LaTeX*. UIT Cambridge, 2010. ISBN: 978-1-906-86017-2. URL: https://www.uit.co.uk/typesetting-mathematics-with-latex.

Page headings

The fancyhdr and extramarks packages **Oostrum**

Pieter van Oostrum. *The fancyhdr and extramarks packages*. 2021. 74 pp. URL: https://ctan.org/pkg/fancyhdr.

Documents the fancyhdr and extramarks packages. Also includes an overview of the LaTeX page mark system. (texdoc fancyhdr).

Tables

Also see the TeX FAQ Floats section: https://www.texfaq.org/#floats

Publication-quality tables in LaTeX **Fear**

Simon Fear. *Publication-quality tables in LaTeX*. 2016. 18 pp. URL: https://ctan.org/pkg/booktabs.

Documents the booktabs package, and also includes thoughts on the design of tabular layouts in general. (texdoc booktabs).

Typesetting Tables with LaTeX **Voß**

Herbert Voß. *Typesetting Tables with LaTeX*. UIT Cambridge, 2011. ISBN: 978-1-906-86025-7. URL: https://www.uit.co.uk/typesetting-tables-with-latex.

Graphics

Also see the TeX FAQ Graphics section: https://www.texfaq.org/#graphics

Visual PSTricks **Casteleyn**

Jean Pierre Casteleyn. *Visual PSTricks*. English, French. 2016. 261 pp. URL: https://ctan.org/pkg/visualpstricks.

A visual FAQ consisting of a small example for each effect. (texdoc -l visualpstricks).

Visual TikZ **Casteleyn**

Jean Pierre Casteleyn. *Visual TikZ*. English, French. 2018. 221 pp. URL: https://ctan.org/pkg/visualtikz.

A visual FAQ consisting of a small example for each effect. (`texdoc -l visualtikz`).

Using Imported Graphics in LaTeX and pdfLaTeX **Reckdahl**

Keith Reckdahl. *Using Imported Graphics in LaTeX and pdfLaTeX*. 2006. 124 pp. URL: https://ctan.org/pkg/epslatex.

The TikZ and PGF Packages **Tantau**

Till Tantau. *The TikZ and PGF Packages*. 2020. 1321 pp. URL: https://ctan.org/pkg/pgf.

As well as documenting the packages, this manual also includes "General guidelines and principles concerning the creation of graphics for scientific presentations, papers, and books".
(`texdoc pgfmanual`).

PSTricks: Graphics and PostScript for TeX and LaTeX **Voß**

Herbert Voß. *PSTricks: Graphics and PostScript for TeX and LaTeX*. UIT Cambridge, 2011. ISBN: 978-1-906-86013-4. URL: https://www.uit.co.uk/pstricks.

Music

LaTeX for Musicians **Gonzato**

Guido Gonzato. *LaTeX for Musicians*. 2019. 66 pp. URL: https://ctan.org/pkg/latex4musicians.

Packages and programs for music symbols, lyrics, chord sheets, sheet music, and guitar tablature.
(`texdoc latex4musicians`).

Presentations

Beamer by Example **Mertz et al.**

Andrew Mertz and William Slough. "Beamer by Example". In: *The PracTeX Journal* 2005.4 (2005). URL: http://tug.org/pracjourn/2005-4/mertz/mertz.pdf.

Graduated examples of the beamer package.

Examples from the book Presentations with LaTeX **Voß**

Herbert Voß. *Examples from the book Presentations with LaTeX*. German. 2009. URL: https://ctan.org/pkg/presentations.

Source for examples from the book.

Examples from the book Presentations with LaTeX **Voß**

Herbert Voß. *Examples from the book Presentations with LaTeX*. 2012. URL: https://ctan.org/pkg/presentations-en.

Source for examples from the book.

Presentations with LaTeX **Voß**

Herbert Voß. *Presentations with LaTeX*. Lehmanns Media GmbH, 2012. 206 pp. ISBN: 9783865414960.

Fonts

Also see the TeX FAQ Fonts section: https://www.texfaq.org/#fonts

The LaTeX Font Catalogue **Jørgensen**

Palle Jørgensen. *The LaTeX Font Catalogue*. URL: https://www.tug.org/FontCatalogue/.

A detailed list of fonts for LaTeX, each with samples and setup information.

LaTeX font encodings **Mittelbach et al.**

Frank Mittelbach et al. *LaTeX font encodings*. 2016. 39 pp. URL: https://ctan.org/pkg/encguide.

About T1 encoding, OT1, etc. (`texdoc encguide`).

Essential NFSS2, version 2 **Rahtz**

Sebastian Rahtz. "Essential NFSS2, version 2". In: *TUGBoat* 14.2 (1993), pp. 132–137. URL: tug.org/TUGboat/Articles/tb14-2/tb39rahtz-nfss.pdf.

A user's view of the New Font Selection Scheme, version 2.

Using TrueType fonts with TeX (LaTeX) and pdfTeX (pdfLaTeX) **Rakityansky**

Damir Rakityansky. *Using TrueType fonts with TeX (LaTeX) and pdfTeX (pdfLaTeX)*. URL: http://www.radamir.com/tex/ttf-tex.htm.

Font selection in LaTeX: The most frequently asked questions **Schmidt**

Walter Schmidt. "Font selection in LaTeX: The most frequently asked questions". In: *The PracTeX Journal* 2006.1 (2006). URL: tug.org/pracjourn/2006-1/schmidt/schmidt.pdf.

Covers basic commands, default fonts, available font families, fonts for certain parts of the document.

LaTeX 2ε font selection **Team**

LaTeX3 Project Team. *LaTeX 2ε font selection*. 2020. 35 pp. URL: https://ctan.org/pkg/fntguide.

Documentation of commands for selecting fonts, as well as those for defining the data-structures used by the selection commands. (`texdoc fntguide`).

Fonts and TeX **TeX User's Group**

TeX User's Group. *Fonts and TeX*. URL: http://tug.org/fonts/.

A collection of links related to TeX and fonts.

Cyrillic languages support in LaTeX **Volovich et al.**

Vladimir Volovich, Werner Lemberg, and LaTeX3 Project Team. *Cyrillic languages support in LaTeX*. 1999. 7 pp. URL: https://ctan.org/pkg/cyrguide.

Installation, usage, encodings. (texdoc cyrguide).

FAQs, symbol references, cheat sheets

Visual PSTricks **Casteleyn**

Jean Pierre Casteleyn. *Visual PSTricks*. English, French. 2016. 261 pp. URL: https://ctan.org/pkg/visualpstricks.

A visual FAQ consisting of a small example for each effect. (texdoc -l visualpstricks).

Visual TikZ **Casteleyn**

Jean Pierre Casteleyn. *Visual TikZ*. English, French. 2018. 221 pp. URL: https://ctan.org/pkg/visualtikz.

A visual FAQ consisting of a small example for each effect. (texdoc -l visualtikz).

LaTeX 2ε Cheat Sheet **Chang**

Winston Chang. *LaTeX 2ε Cheat Sheet*. 2006. 2 pp. URL: https://ctan.org/pkg/latexcheat.

A quick-reference guide for LaTeX and BibTeX. Also in Brazilian Portuguese, German, Japanese, and Spanish. (texdoc latexcheat).

Detexify

Detexify. URL: http://detexify.kirelabs.org/classify.html.

Draw a symbol, and the website tells you which macros might make that symbol.

TeX FAQ

TeX FAQ. URL: https://texfaq.org/.

An online resource, which includes a detailed list of printed books.

Online tutorials on LaTeX **Indian TeX Users Group**

Indian TeX Users Group. *Online tutorials on LaTeX*. 2000. URL: http://tug.org/tutorials/tugindia/.

An extensive tutorial covering many aspects of LaTeX.

LaTeX Cheat Sheet **Lammarsch**

Marion Lammarsch. *LaTeX Cheat Sheet*. 2017. 4 pp. URL: https://ctan.org/pkg/latex-refsheet.

A reference for LaTeX with KOMA-Script. (`texdoc latex-refsheet`).

The Comprehensive LaTeX Symbol List **Pakin**

Scott Pakin. *The Comprehensive LaTeX Symbol List*. 2017. 348 pp. URL: https://ctan.org/pkg/comprehensive.

More than 14,000 symbols and LaTeX commands. (`texdoc comprehensive`).

The Visual LaTeX FAQ **Pakin**

Scott Pakin. *The Visual LaTeX FAQ*. 33 pp. URL: https://ctan.org/pkg/visualfaq.

Click on a visual element to learn how it is programmed. (`texdoc visualFAQ`).

Biblatex Cheat Sheet **Rees**

Clea F. Rees. *Biblatex Cheat Sheet*. 2017. 2 pp. URL: https://ctan.org/pkg/biblatex-cheatsheet.

A tri-fold quick reference. (`texdoc biblatex-cheatsheet`).

Every symbol (most symbols) defined by unicode-math **Robertson**

Will Robertson. *Every symbol (most symbols) defined by unicode-math*. 2018. 119 pp. URL: https://ctan.org/pkg/unicode-math.

Unicode math symbols. (`texdoc unimath-symbols`).

TeX font errors: Cheatsheet **Schlömer**

Nico Schlömer. *TeX font errors: Cheatsheet*. 2010. 3 pp. URL: https://ctan.org/pkg/tex-font-errors-cheatsheet.

How TeX integrates fonts, and related error messages. (`texdoc tex-font-errors-cheatsheet`).

shapecatcher

shapecatcher. URL: http://shapecatcher.com/.

Draw a symbol, and the website tells you which Unicode symbols it might be.

TeX Resources on the Web **TeX Users Group**

TeX Users Group. *TeX Resources on the Web*. URL: http://tug.org/interest.html.

A large collection of links to numerous resources.

Source code

The source code for LaTeX 2_ε itself is also included in the distribution.

The LaTeX 2ε Sources **Braams et al.**

Johannes Braams et al. *The LaTeX 2ε Sources*. 955 pp. URL: https://ctan.org/pkg/source2e.

Occasionally useful for figuring out how something really works. (texdoc source2e).

List of internal LaTeX 2ε Macros useful to Package Authors **Scharrer**

Martin Scharrer. *List of internal LaTeX 2ε Macros useful to Package Authors*. 14 pp. URL: https://ctan.org/pkg/macros2e.

A list of the core LaTeX macros, each of which is linked to the source code. (texdoc macros2e).

International languages

Multiple languages

The following are available in several languages. Also see CTAN's topic for each language for additional translations of package and other documentation.

Free Programming Books **Foundation**

Ebook Foundation. *Free Programming Books*. URL: https://github.com/EbookFoundation/free-programming-books.

A variety of TeX-related and other programming books and documents.

LaTeX 2ε: An unofficial reference manual **Greenwade et al.**

George D. Greenwade et al. *LaTeX 2ε: An unofficial reference manual*. English, French, Spanish. 246 pp. URL: https://latexref.xyz.

A thorough but concise reference manual for LaTeX 2ε, available in several languages. (texdoc -l latex2e-help).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Brazilian Portuguese

Guia Rápido LaTeX 2ε **Chang**

Winston Chang. *Guia Rápido LaTeX 2ε*. Brazilian. Trans. by Silvio C. G. Granja. 2006. 2 pp. URL: https://ctan.org/pkg/latexcheat-ptbr.

A quick-reference guide for LaTeX and BibTeX. (`texdoc latexcheat-ptbr`).

LaTeX 2ε Via Exemplos **Massago**

Sadao Massago. *LaTeX 2ε Via Exemplos*. Brazilian. 2018. 264 pp. URL: https://ctan.org/pkg/latex-via-exemplos.

A study course.

Bulgarian

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Catalan

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Chinese

(Also see the Chinese category of the package list: p. 31)

TeX 急就帖 **Abrahams et al.**

Paul W. Abrahams, Kathryn A. Hargreaves, and Karl Berry. *TeX 急就帖*. Chinese. 2014. 429 pp. URL: https://ctan.org/pkg/impatient.

A tutorial and reference for TeX, plain TeX, and Eplain. (`texdoc impatient-cn`).

Asymptote 范例教程 刘海洋

刘海洋. *Asymptote 范例教程*. Chinese. 2009. URL: https://ctan.org/pkg/asymptote-by-example-zh-cn.

A tutorial for asymptote in the form of a graphical FAQ. (`texdoc asymptote-by-example-zh-cn`).

CTEX FAQ (常见问题集) 吴凌云

吴凌云. *CTEX FAQ (常见问题集)*. Chinese. 2007. URL: https://ctan.org/pkg/ctex-faq.

FAQ from the Chinese TeX Society. (texdoc ctex-faq).

一份简短的关于 **LaTeX**安装的介绍 王然

王然. 一份简短的关于 *LaTeX*安装的介绍. Chinese. 2020. 49 pp. URL: https://ctan.org/pkg/install-latex-guide-zh-cn.

Installing LaTeX and compiling documents, using various operating systems.
(texdoc install-latex-guide-zh-cn).

Asymptote 中的常见问题 (FAQ) 译者

译者. *Asymptote 中的常见问题 (FAQ)*. Chinese. 2009. 26 pp. URL: https://ctan.org/pkg/asymptote-faq-zh-cn.

A translation of the Asymptote FAQ. (texdoc asymptote-faq-zh-cn).

LaTeX Notes v 1.20 **Huang**

Alpha Huang. *LaTeX Notes v 1.20*. Chinese. 2008. 107 pp. URL: https://ctan.org/pkg/latex-notes-zh-cn.

An introduction to TeX and LaTeX, including the use of Chinese fonts. (texdoc latex-notes).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

Czech

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

Dutch

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian,

Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

Estonian

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

Finnish

Käytännöllistä Latexia **Likonen**

Teemu Likonen. *Käytännöllistä Latexia*. Finnish. 2021. 274 pp. URL: https://ctan.org/pkg/kaytannollista-latexia.

A practical manual in Finnish (texdoc latexia).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

French

Also see Online communities.

TEX pour l'Impatient **Abrahams et al.**

Paul W. Abrahams, Kathryn A. Hargreaves, and Karl Berry. *TEX pour l'Impatient*. French. 2004. 407 pp. URL: https://ctan.org/pkg/impatient.

A tutorial and reference for TeX, plain TeX, and Eplain. (texdoc impatient-fr).

Apprends LaTeX! **Baudoin**

Marc Baudoin. *Apprends LaTeX!* French. 2012. 222 pp. URL: http://www.babafou.eu.org/Apprends_LaTeX.

A full textbook written for École Nationale Supérieure de Techniques Avancées.

Initiation à LaTeX **Bouzigues**

Adrien Bouzigues. *Initiation à LaTeX. Pour débutants ou jeunes utilisateurs*. French. 2017. 273 pp. URL: https://ctan.org/pkg/guide-latex-fr.

A guide on LaTeX — for beginners or advanced users.

Visual PSTricks **Casteleyn**

Jean Pierre Casteleyn. *Visual PSTricks*. English, French. 2016. 261 pp. URL: https://ctan.org/pkg/visualpstricks.

A visual FAQ consisting of a small example for each effect. (`texdoc -l visualpstricks`).

Visual TikZ **Casteleyn**

Jean Pierre Casteleyn. *Visual TikZ*. English, French. 2018. 221 pp. URL: https://ctan.org/pkg/visualtikz.

A visual FAQ consisting of a small example for each effect. (`texdoc -l visualtikz`).

French FAQ of the Gutenberg TeX user group

French FAQ of the Gutenberg TeX user group. French. Trans. by Marie-Paule Kluth. URL: https://ctan.org/pkg/faq-fr.

Rédaction avec LaTeX **Goulet**

Vincent Goulet. *Rédaction avec LaTeX*. French. 2020. 196 pp. URL: https://ctan.org/pkg/formation-latex-ul.

An introductory course prepared for Université Laval, Québec, Canada.
(`texdoc formation-latex-ul`), (`texdoc formation-latex-ul-diapos`).

LaTeX 2ε: An unofficial reference manual **Greenwade et al.**

George D. Greenwade et al. *LaTeX 2ε: An unofficial reference manual*. English, French, Spanish. 246 pp. URL: https://latexref.xyz.

A thorough but concise reference manual for LaTeX 2ε, available in several languages.
(`texdoc -l latex2e-help`).

Tout Ce Que Vous Avez Toujours Voulu Savoir Sur LaTeX Sans Jamais Oser Le Demander **Lozano**

Vincent Lozano. *Tout Ce Que Vous Avez Toujours Voulu Savoir Sur LaTeX Sans Jamais Oser Le Demander*. French. 2011. 271 pp. URL: http://lozzone.free.fr/index.php?vlunch=latex.

A book for beginners.

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Utilisation de Graphiques Importés dans LaTeX2 **Reckdahl**

Keith Reckdahl. *Utilisation de Graphiques Importés dans LaTeX2*. French. 2001. 148 pp. URL: https://ctan.org/pkg/fepslatex.

How to import graphics in LaTeX 2ε. (`texdoc fepslatex`).

XeLaTeX— Appliqué Aux Sciences Humaines **Rouquette**

Maïeul Rouquette. *XeLaTeX— Appliqué Aux Sciences Humaines*. French. 2012. 268 pp. URL: https://ctan.org/pkg/latex-sciences-humaines.

Apprendre à programmer en TeX **Tellechea**

Christian Tellechea. *Apprendre à programmer en TeX*. French. 2014. 580 pp. URL: https://ctan.org/pkg/apprendre-a-programmer-en-tex.

Basic programming of TeX, with examples. (`texdoc apprendre`).

TeXniques

TeXniques. Groupe francophone des Utilisateurs de TEX, LaTeX et logiciels compagnons. French. URL: https://www.gutenberg.eu.org/TeXniques.

A collection of resources.

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

German

(Also see Users groups, and Online communities.)

LaTeX 2ε Befehlsübersicht **Chang**

Winston Chang. *LaTeX 2ε Befehlsübersicht*. German. Trans. by Tammo Schwindt. 2006. 2 pp. URL: https://ctan.org/pkg/latexcheat-de.

A quick-reference guide for LaTeX and BibTeX. (`texdoc latexcheat-de`).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

The DANTE TeX Users Group Frequently Asked Questions

The DANTE TeX Users Group Frequently Asked Questions. German. URL: https://ctan.org/pkg/faq-de.

Farbige Mathematik **Voß**

Herbert Voß. "Farbige Mathematik". German. In: *TeXnische Komödie* (2004). URL: https://ctan.org/pkg/voss-mathcol.

Math in color. In German, but with easy-to-use examples. (`texdoc voss-mathcol`).

Anleitung **Weissenburger et al.**

Jens Weissenburger and Damir Rakityansky. *Anleitung*. German. 2003. URL: https://ctan.org/pkg/anleitung.

Using LaTeX, MikTeX, and TrueType fonts.

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Indian

A practical guide to LaTeX and polyglossia for Indian Languages **Holkar**

Rohit Dilip Holkar. *A practical guide to LaTeX and polyglossia for Indian Languages*. Marathi. 2017. 37 pp. URL: https://ctan.org/pkg/latex-mr.

Discusses Marathi, but also relevent to other Indian langauges. (`texdoc latex-mr`).

Italian

Manuale utente per il pacchetto amsmath **American Mathematical Society et al.**

American Mathematical Society and LaTeX3 Project Team. *Manuale utente per il pacchetto amsmath*. Italian. Trans. by Giulio Agostini et al. 1999. 39 pp. URL: http://tug.ctan.org/tex-archive/info/italian/amsldoc/itamsldoc.pdf.

Manual for amsmath. (`texdoc amsldoc-it`).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

Japanese

(Also see the Japanese category of the package list: p. 31)

LaTeX2e for authors **LaTeX3 Project Team**

LaTeX3 Project Team. *LaTeX2e for authors*. Japanese. Trans. by Yukitoshi FUJIMURA. 2015. 34 pp. URL: https://www.latex-project.org/help/documentation/usrguide_jpn.pdf.

An overview of the new features of LaTeX 2ε compared to LaTeX2.09.

User's Guide for the amsmath Package **American Mathematical Society et al.**

American Mathematical Society and LaTeX3 Project Team. *User's Guide for the amsmath Package*. Japanese. Trans. by Yukitoshi FUJIMURA. 2018. 45 pp. URL: https://www.latex-project.org/help/documentation/amsldoc_jpn.pdf.

Manual for amsmath.

pLaTeX 2ε チートシート **Chang**

Winston Chang. *pLaTeX 2ε チートシート*. Japanese. Trans. by Takuto Asakura. 2006. 2 pp. URL: https://ctan.org/pkg/platexcheat.

A quick-reference guide for LaTeX and BibTeX. (texdoc platexcheat).

Short Math Guide for LaTeX **Downes et al.**

Michael Downes and Barbara Beeton. *Short Math Guide for LaTeX*. Japanese. Trans. by Yukitoshi FUJIMURA. 2017. 21 pp. URL: https://www.latex-project.org/help/documentation/short-math-guide_jpn.pdf.

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (texdoc -l lshort).

Korean

(Also see the Korean category of the package list: p. 31)

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Marathi

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Mongol

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Persian

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Polish

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Portuguese

Introdução ao Uso do Preparador de Documentos LaTeX **Campani**

Carlos A. P. Campani. *Introdução ao Uso do Preparador de Documentos LaTeX*. Portuguese. 2011. 188 pp. URL: https://ctan.org/pkg/cursolatex.

A tutorial as PDF slides. (`texdoc cursolatex`).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Russian

Basic LaTeX **Kuznetsov**

Alexey Kuznetsov. *Basic LaTeX*. Russian. 2021. 364 pp. URL: https://ctan.org/pkg/basiclatex-ru.

A tutorial in Russian.

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Slovenian

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Spanish

CervanTeX (Spanish TeX Group) FAQ

CervanTeX (Spanish TeX Group) FAQ. Spanish. URL: https://ctan.org/pkg/faq-es.

(`texdoc es-tex-faq`).

Acordeón para LaTeX 2ε **Chang**

Winston Chang. *Acordeón para LaTeX 2ε*. Spanish. Trans. by J. Luis Rivera. 2006. 2 pp. URL: https://ctan.org/pkg/latexcheat-esmx.

A quick-reference guide for LaTeX and BibTeX. (`texdoc latexcheat-esmx`).

LaTeX 2ε: An unofficial reference manual **Greenwade et al.**

George D. Greenwade et al. *LaTeX 2ε: An unofficial reference manual*. English, French, Spanish. 246 pp. URL: https://latexref.xyz.

A thorough but concise reference manual for LaTeX 2ε, available in several languages. (`texdoc -l latex2e-help`).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Thai

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Turkish

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Ukranian

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

Vietnamese

Hướng dẫn sử dụng gói amsmath **American Mathematical Society et al.**

American Mathematical Society and LaTeX3 Project Team. *Hướng dẫn sử dụng gói amsmath*. Vietnamese. Trans. by Ky Anh. 1999. 36 pp. URL: https://ctan.org/pkg/amslatexdoc-vietnamese.

Manual for amsmath. (`texdoc amsldoc-vn`).

The Not So Short Introduction to LaTeX 2ε **Oetiker**

Tobias Oetiker. *The Not So Short Introduction to LaTeX 2ε*. Bulgarian, Chinese, Czech, Dutch, Estonian, Finnish, French, German, Italian, Japanese, Korean, Mongol, Persian, Polish, Portuguese, Russian, Slovenian, Spanish, Thai, Turkish, Ukranian, Vietnamese. 2015. 153 pp. URL: https://ctan.org/pkg/lshort.

Covers introductory material, customizations, and a simple package. (`texdoc -l lshort`).

LearnLaTeX.org **Wright et al.**

Joseph Wright et al. *LearnLaTeX.org*. Catalan, German, English, French, Marathi, Portuguese, Vietnamese. 2021. URL: https://www.learnlatex.org/.

Sixteen lessons with examples, in multiples languages.

Journals

The PracTeX Journal **TeX Users Group**

TeX Users Group. *The PracTeX Journal*. URL: http://tug.org/pracjourn/.

The online journal of the TeX Users Group. Twenty issues, from 2005–2012.

TUGBoat **TeX Users Group**

TeX Users Group. *TUGBoat*. URL: http://tug.org/TUGboat/.

The Communications of the TeX Users Group. Published since 1980. Articles covering every aspect of TeX.

Interviews

TUG Interview Corner **TeX Users Group**

TeX Users Group. *TUG Interview Corner*. URL: http://tug.org/interviews/.

A large collection of interviews and articles about people related to TeX. Includes links to more than 250 lectures and other recordings by Donald Knuth, and various historical information.

Typesetting examples

- A large collection of examples: https://texample.net/
- A collection of small examples: http://tug.org/texshowcase/
- Excerpts from many books: https://ctan.org/topic/book-ex
- Entire books: http://www.tsengbooks.com/
- Discussion: https://tex.stackexchange.com/questions/1319/showcase-of-beautiful-typography-done-in-tex-friends
- Discussion: https://tex.stackexchange.com/questions/281415/showcase-of-beautiful-invitations-in-tex

General typesetting theory

Discussion about general typesetting theory, presented by various TeX-related authors.
For a list of non-LaTeX-specific books, see https://www.texfaq.org/FAQ-type-books.

Package canoniclayout **Beccari**

Claudio Beccari. *Package canoniclayout*. 2011. 8 pp. URL: https://ctan.org/pkg/canoniclayout.

Documentation for the canoniclayout package. Also includes ideas regarding text-block proportions. (texdoc canoniclayout).

Publication-quality tables in LaTeX **Fear**

Simon Fear. *Publication-quality tables in LaTeX*. 2016. 18 pp. URL: https://ctan.org/pkg/booktabs.

Documents the booktabs package, and also includes thoughts on the design of tabular layouts in general. (texdoc booktabs).

KOMA-Script — The Guide **Kohm**

Markus Kohm. *KOMA-Script — The Guide*. 2018. 565 pp. URL: https://ctan.org/pkg/koma-script.

Documentation for the KOMA-Script package. Also includes discussion about the page layout of a book. (texdoc typearea).

The Octavo Package **Revets**

Stefan A. Revets. "The Octavo Package". In: *TUGboat* 23 3/4 (2002), p. 269. URL: https://ctan.org/pkg/octavo.

Design principles and guidelines emulating books from the Renaissance. (`texdoc octavo`).

The TikZ and PGF Packages **Tantau**

Till Tantau. *The TikZ and PGF Packages*. 2020. 1321 pp. URL: https://ctan.org/pkg/pgf.

As well as documenting the packages, this manual also includes "General guidelines and principles concerning the creation of graphics for scientific presentations, papers, and books".
(`texdoc pgfmanual`).

A TUFTE-STYLE BOOK **The Tufte-LaTeX Developers**

The Tufte-LaTeX Developers. *A TUFTE-STYLE BOOK*. 2015. 42 pp. URL: https://ctan.org/pkg/tufte-latex.

Documentation for the Tufte-LaTeX document classes. Also includes layout ideas from the books of Edward R. Tufte. (`texdoc tufte-latex`).

A Few Notes on Book Design **Wilson**

Peter Wilson. *A Few Notes on Book Design*. 1st ed. The Herries Press, Aug. 2009. 139 pp. URL: https://ctan.org/pkg/memdesign.

More than 100 pages of discussion about book design and typography. (`texdoc memdesign`).

Accessing embedded information

`texdoc` and `mthelp`

A large amount of documentation is included in a TeX distribution. For TeXLive distributions, package documentation can be accessed with the `texdoc` program. Enter "`texdoc -l <name>`" to search for matching package, file, or program names. In some cases the same document is available in both letter or A4 paper sizes, or in several languages. `texdoc` is also available online, with popular packages sorted by category. (http://www.texdoc.net/)

For MikTeX, the `mthelp` program accesses package documentation. Enter "`mthelp <name>`".

`kpsewhich`

The program `kpsewhich` may be used to find out where a file is located. `kpsewhich filename` searches for and returns the path to the given filename.

`kpsewhich` can also return directories, such as:

```
kpsewhich -var-value TEXMFROOT
kpsewhich -var-value TEXMFDIST
kpsewhich -var-value TEXMFLOCAL
```

Some package authors choose not to include the source code in the package documentation. To view the source code:

1. To locate and read a package's `.sty` file:

   ```
   kpsewhich package.sty
   ```

   Usually these files have their comments removed, so it is better to use the `.dtx` file instead.

2. The `.dtx` file is usually available, and will have the package's source code.

   ```
   kpsewhich package.dtx
   ```

   If it is not installed on your local system, it will be necessary to download the `.dtx` file from CTAN (see the next section).

   The comments are not yet typeset and so will not be as easily read.

3. To typeset the documentation with the source code, copy the `.dtx` file and any associated image files somewhere local and then look for `\OnlyDescription` in the source. This command tells the ltxdoc package not to print the source code.

4. Remove `\OnlyDescription`, then process the `.dtx` file with

   ```
   pdflatex package.dtx
   ```

   Barring unusual circumstances, this will create a new documentation `.pdf` file with the package source code included.

Obtaining packages — Comprehensive TeX Archive Network (CTAN)

TeXLive installations use the `tlmgr` program to obtain packages. MikTeX installations automatically install packages as needed. Where TeX is installed by an operating-system package manager, that manager should be used to install additional packages.

For custom installations, it may be necessary to manually install packages downloaded from the Comprehensive TeX Archive Network (CTAN), which provides a master collection of packages. A search function is available, which is useful when you know the name of a package or its author, and a list of topics is also provided. There are so many topics, however, that finding the right topic can be a problem in itself. One useful method to find what you are looking for is to search for a related package you may already know about, then look at its description on CTAN to see what topics are shown for it. Selecting these topics then shows you related packages. (`https://ctan.org/`)

Useful classes, packages, and programs

Use `texdoc` or `mthelp` to access information about each of the following.

General-use packages and classes

Classes:
memoir, koma-script

Page layout and headings:
fancyhdr, geometry, microtype, nowidow, titleps

Fonts:
font-change-xetex, fontspec, mathspec, unicode-math

Sectioning:
epigraph, fncychap, quotchap, sectionbreak, sectsty, titlesec, tocvsec2

Table of contents:
etoc, minitoc, multitoc, shorttoc, titletoc, tocbibind, tocdata, tocloft, tocvsec2

Title page:
authblk, titling

Front and back matter:
abstract, appendix

Indexing:
`makeindex`, `xindy`, `xindex`, gindex, hvindex, idxlayout, imakeidx, index, makeidx, splitidx, varindex, xindex

Glossary:
glossaries, nomencl

Bibliography:
`bibtex`, biblatex, `custom-bib`

Cross-referencing:
cleveref, hyperref, url, xr-hyper, xurl, zref

Foot notes, margin notes, page notes:
bigfoot, endheads, endnotes, footmisc, manyfoot, marginfit, marginfix, marginnote, pagenote, parnotes, sidenotes

Math:
amsmath, amssymb, breqn, mathtools, resizegather, nicematrix, scalerel, stackrel

Theorems:
amsthm, apxproof, ntheorem, shadethm, theorem, thmbox, thmtools

Units and fractions:
nicefrac, siunitx, xfrac

Floats:
caption, dblfloatfix, endfloat, fewerfloatpages, float, floatrow, hypcap, keyfloat, newfloat, placeins, rotfloat, stfloats, subcaption, subfig, subfloat, wrapfig

Tabular:
array, booktabs, colortbl, longtable, ltxtable, multirow, supertabular, tabularx, tabulary, threeparttable, threeparttablex, widetable, xltabular, xtab

Graphics:
asymptote, curves, fitbox, graphicx, pict2e, pstricks, tikz, xy

Color:
normalcolor, xcolor

Lists:
enumerate, enumitem, paralist

Minipages:
eqparbox, minibox, pbox, shapepar

Quotations and verse:
csquotes, epigraph, quoting, verse

Verbatim:
fancyvrb, fvextra, moreverb, shortvrb, upquote, verbatim

Frames:
boxedminipage2e, fancybox, fbox, framed, mdframed, niceframe, shadow, tcolorbox

Embellishments:
fancypar, fancytabs, fourier-orns, lettrine, pgfornament, pst-vectorian, sectionbreak

Multi-column:
adjmulticol, multicol, multicolrule, vwcol

Margins:
fullwidth, hanging, midpage

Line numbering:
lineno

Algorithms and listings:
algorithm2e, algorithmicx, listings, listingsutf8, minted

Acronyms:
acro, acronym

Ordinals:
engord, fmtcount, nth

Direct formatting:
cancel, ellipsis, embrac, enparen, hyphenat, lips, lua-check-hyphen, luacolor, pdfcol, pdfcolmk, pdfrender, realscripts, relsize, seqsplit, soul, soulpos, soulutf8, stackengine, textfit, thinsp, trimclip, truncate, ulem, umoline, underscore, uspace, xellipsis

Symbols:
academicons, amssymb, bbding, chemgreek, dingbat, euro, eurosym, fontawesome, fontawesome5, fourier-orns, gensymb, latexsym, marvosym, metalogo, metalogox, pifont, textalpha, textcomp, textgreek, typicons, xunicode

Files:
attachfile, attachfile2, hyperxmp, intopdf, pdfpages, pdfx, xmpincl

Admonitions:
awesomebox, notes

Editorial:
changebar, changelog, changes, easy-todo, easyReview, ed, errata, fixme, fixmetodonotes, pdfcomment, pdfmarginpar, todo, todonotes, tram, xechangebar

Accessibility:
accessibility, accsupp, axessibility, pdfcomment, repltext, tagpdf

Presentations:
beamer, powerdot

Multi-langauge:
babel, beamer-rl, bidi, polyglossia

Chinese / Japanese / Korean (CJK):
cjkpunct, xeCJK

Chinese:
ctex, upzhkinsoku, xpinyin, zhlineskip, zhspacing

Japanese:
bxjscls, luatexja, platex, plautopatch, tascmac, uplatex, zxjatype

Korean:
kotex, luatexko, xetexko.

Debug:
chkfloat, cmdtrack, dprogress, inputtrc, lua-visual-debug, refcheck

Automatic compiling

The programs `arara` and `latexmk` automatically recompile as necessary to resolve all dependencies.

Converting to HTML and other document formats

Using TeX to generate the HTML:
The lwarp package and the `tex4ht` program each use native LaTeX to interpret the document and generate HTML. More of LaTeX is supported compared to the translators listed below.

lwarp package:
Supports hundreds of packages. Generates HTML, and provides indirect assistance for EPUB conversion and copy/paste into a word-processor. https://ctan.org/pkg/lwarp

`tex4ht` program:
Generates HTML, EPUB, ODT, and Docbook. http://tug.org/tex4ht/

Translators:
These systems use external programs to translate a subset of LaTeX syntax into HTML. Search for each on CTAN (http:\ctan.org).

HEVEA:
http://hevea.inria.fr/

TTH:
http://hutchinson.belmont.ma.us/tth/

GELLMU:
http://www.albany.edu/~hammond/gellmu/

LaTeXML:
http://dlmf.nist.gov/LaTeXML/

PlasTeX:
https://github.com/tiarno/plastex

LaTeX2HTML:
http://www.latex2html.org/ and http://ctan.org/pkg/latex2html

TeX2page:
http://ds26gte.github.io/tex2page/index.html

LaTeX math to HTML:
GladTeX takes a LaTeX math expression and generates the corresponding HTML.

GladTeX:
http://humenda.github.io/GladTeX/

Programming LaTeX

A number of packages are especially useful for LaTeX programmers: (`texdoc <packagename>`)

xifthen: Conditionals.

etoolbox: A wide range of programming tools, often avoiding the need to resort to low-level TeX.

etextools: Adds to etoolbox. Strings, lists, and more.

xparse: Define macros and environments with flexible argument types.

environ: Process environment contents.

arrayjobx, fifo-stack, forarray, forloop, xfor: Programming arrays, stacks, and loops.

iftex: Detect TeX engine.

ifplatform: Detect operating system.

xstring: String manipulation.

keyval, xkeyval, kvsetkeys: Key/value arguments.

pgfkeys, pgfkeyx: Another form of key/value arguments.

kvoptions: Key/value package options.

expl3: LaTeX3 programming.

l3keys, l3keys2e: Key/value for LaTeX3.

chktex: Locates typographic errors.

CTAN topic macro-supp: An entire topic of useful programming macros.

Creating and documenting new packages

Documentation for those interested in creating their own package or class:

LaTeX 2ε for class and package writers **LaTeX3 Project Team**

LaTeX3 Project Team. *LaTeX 2ε for class and package writers*. 33 pp. URL: https://ctan.org/pkg/clsguide.

Programming a package or class. (`texdoc clsguide`).

Rolling your own Document Class: Using LaTeX to keep away from the Dark Side **Flynn**

Peter Flynn. "Rolling your own Document Class: Using LaTeX to keep away from the Dark Side". In: *TUGboat* 28:1 (2007), pp. 110–123. URL: http://tug.org/TUGboat/tb28-1/tb88flynn.pdf.

An overview of the article class.

How to develop your own document class — our experience **Mansfield**

Niall Mansfield. "How to develop your own document class — our experience". In: *TUGboat* 29:3 (2008), pp. 356–361. URL: http://tug.org/TUGboat/tb29-3/tb93mansfield.pdf.

A comparison of developing class vs. package files.

The doc and shortvrb packages **Mittelbach**

Frank Mittelbach. *The doc and shortvrb packages*. 64 pp. URL: https://ctan.org/pkg/doc.

Packages for documenting packages. (`texdoc doc`).

The DocStrip program **Mittelbach et al.**

Frank Mittelbach et al. *The DocStrip program*. 61 pp. URL: https://ctan.org/pkg/docstrip.

The program which processes `.dtx` and `.ins` files to generate documentation and `.sty` files.
(`texdoc docstrip`).

Good things come in little packages: An introduction to writing `.ins` and `.dtx` files **Pakin**

Scott Pakin. "Good things come in little packages: An introduction to writing `.ins` and `.dtx` files". In: *TUGboat* 29:2 (2008), pp. 305–314. URL: http://tug.org/TUGboat/tb29-2/tb92pakin.pdf.

How and why to create your own `.dtx` and `.ins` files.

How to Package Your LaTeX Package **Pakin**

Scott Pakin. *How to Package Your LaTeX Package*. 36 pp. URL: https://ctan.org/pkg/dtxtut.

A tutorial. (`texdoc dtxtut`).

Wikibooks

Wikibooks. LaTeX. 2017. URL: https://en.wikibooks.org/wiki/LaTeX.

An online book, includes information about creating LaTeX packages and classes.

Users groups

TeX Users Group: http://tug.org

Lists of international users groups:

- http://tug.org/usergroups.html
- https://ctan.org/lugs
- http://www.ntg.nl/lug/

Online communities

English forums:

TeX — LaTeX Stack Exchange: Almost any question has already been asked, and a quick web search will find answers, ranked by vote. http://tex.stackexchange.com

LaTeX Community: A traditional forum with quick replies to your questions
http://www.latex-community.org

German forums:

TeXwelt: http://texwelt.de/wissen/

goLaTeX: http://golatex.de

French forums:

TeXnique.fr: http://texnique.fr

Mailing lists: Several dozen, spanning a wide range of TeX-related topics.
http://tug.org/mailman/listinfo

Newsgroup: comp.text.tex

Online editing and collaboration

Overleaf: Collaborative editing of LaTeX documents online. https://www.overleaf.com/

Distributions — LaTeX for various operating systems

TeXLive: http://tug.org/texlive Unix and Windows

MiKTex: https://miktex.org Windows and Mac

proTeXt: http://tug.org/protext/ Windows

MacTex: http://tug.org/mactex/ Mac

Change log

2017/03/06: Initial version.

2017/10/04: Added users groups, mailing lists, distributions, LuaTeX, XeTeX, chktex. Organization and formatting improvements.

2017/10/14: More information about accessing embedded documentation.

2018/01/18: Added texdoc.net.

2018/01/21: Added latex-veryshortguide, first-latex-doc, beginlatex, intro-scientific, guide-latex-fr.

2018/03/24: Added interface3, dickimaw-novices, dickimaw-thesis.

2018/04/01: Added TeXnique.fr.

2018/06/28: Added sections for non-English documents and general typesetting theory. Updated host and name for TeX FAQ. Added latex-via-exemplos and Ebook Foundation free programming books.

2018/10/18: Updated URL for *LaTeX 2ε: An unofficial reference manual*.

2020/12/14: Improved bibliography. Added categories for math and music; startlatex2e; items written in French, German, Indian, Italian, Japanese, Portuguese, Vietnamese; Dante users group.

2021/01/02: Now uses biblatex. Added mthelp, many international documents, and categories for FAQs and cheat sheets, graphics, tables, and fonts. Added lists of packages by category. Added Overleaf.

2021/01/09: Added several resources from TUG including journals and interviews, and more for the list of packages.

2021/12/30: Added usrguide3, learnlatex.org, latex3-tutorial, many international resources.