

# LaTeX workshop

EGG summer school, Brno

August 1, 2022

# LaTeX installation

<https://texblog.org/installing-latex/>

- Windows: MikTeX
- Mac: MacTeX, TeXLive
- Linux: TeXLive

# Using LaTeX in linguistics

- Helpful sites/documents:
  - <https://www.linguisticsociety.org/content/using-latex-linguistics>
  - [http://www.ankehimmelreich.de/downloads/skript\\_latex.pdf](http://www.ankehimmelreich.de/downloads/skript_latex.pdf)
  - <https://staticweb.hum.uu.nl/medewerkers/alexis.dimitriadis/latex/>
- Different packages that can be installed:
  - Linguistic examples (with glosses etc.): `linguex`
  - Syntactic trees: `qtree`
  - Bibliography: `natbib`
  - IPA in LaTeX: `tipa` packageSee also:  
<https://myweb.uiowa.edu/rsmorris/latex/ipa.html>

# Overleaf

- Good for collaborations
- Downside: You have to be online to work with it and build the documents
- Useful links:
  - [https://www.overleaf.com/learn/latex/Learn\\_LaTeX\\_in\\_30\\_minutes](https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes)
  - <https://www.overleaf.com/learn>
  - <https://www.overleaf.com/latex/templates>

# Document classes

e.g.

- paper: for any paper
- beamer: for poster presentation or slides
- book: for documents that consist of several chapters
- ...

**NB** In beamer, examples with glosses in linguex can appear in a different font (serif); one can force a sansserif font throughout by adding different things to the beginning of the document:

- `\sffamily`
- `\let\eachwordone=\sf`  
`\let\eachwordtwo=\sf`  
`\let\eachwordthree=\sf`

# Formal semantics in LaTeX

**Math mode:** between dollar signs, e.g.  $\$xyz\$$  (with longer formula: once around the whole formula)

- lambda:  $\$\lambda\$$   $\lambda$
- existential quantifier:  $\$\exists\$$   $\exists$
- universal quantifier:  $\$\forall\$$   $\forall$
- Iota operator:  $\$\iota\$$   $\iota$
- negation:  $\$\neg\$$   $\neg$
- conjunction:  $\$\wedge\$$   $\wedge$
- disjunction:  $\$\vee\$$   $\vee$
- subscript:
  - $\text{\textsubscript{xyz}}$   $\text{bla}_{xyz}$
  - $\$_x\$$  /  $\$_{xyz}\$$   $\text{bla}_x$  /  $\text{bla}_{xyz}$
- superscript:
  - $\text{\textsuperscript{xyz}}$   $\text{bla}^{xyz}$
  - $\$^x\$$  /  $\$^{xyz}\$$   $\text{bla}^x$  /  $\text{bla}^{xyz}$
- ...

# Formal semantics in LaTeX

- (S)DRT in LaTeX: <https://ctan.org/pkg/sdrt?lang=en>
- Semantic brackets, various options:

e.g. `\def\denotes#1{\$\lbrack\!\lbrack$\{#1V$\rbrack\!\rbrack$}`

`\denotes{dog}` [[dog]]

e.g. `\newcommand{\sembra}[1]{\ensuremath{\[, [ \! [`  
`}\mbox{#1}\ensuremath{[ \! ] \, } }`

`\sembra{dog}` [[dog]]

You can also google “math symbols latex” and get various lists, e.g.:

- [https://oeis.org/wiki/List\\_of\\_LaTeX\\_mathematical\\_symbols](https://oeis.org/wiki/List_of_LaTeX_mathematical_symbols)
- <https://www.caam.rice.edu/~heinken/latex/symbols.pdf>

## Some more useful tips

- Short versions for commands can be defined, e.g.:
  - `\def\bi{\begin{itemize}}`
  - `\def\ei{\end{itemize}}`
- Commenting out, different options:
  - Prefacing the percentage sign: `%xyz`
  - `\iffalse xyz \fi`
- Q&A forum: <https://tex.stackexchange.com/>