Dictating LaTeX using Mathfly

Mike Roberts

January 24, 2019

Contents

1 Introduction

All of these commands can be modified or added to by editing "config/latex.toml" or using the voice command "configure latex".

2 Bibliography management

Once you have added the location of your .bib file (using regular slashes) to your LaTeX config file, Mathfly includes a number of commands to make bibliography management easy:

Insert my (bib resource — bibliography)	\addbibresource{your_bibliography.bib}
Add paper to bibliography	Searches google scholar for the highlighted text (paper title), appends the first resulting bibTeX citation to your bibliography file and adds the tag to the clipboard, ready to be pasted into a document.
Add book to bibliography	Same as above, but searches goodreads instead.

3 Document classes

Prefixed by "document class", these commands produce for example "\documentclass{article}"

article	article
beamer	beamer
book	book
letter	letter
proceedings	proc
report	report

4 Packages

Prefixed by "use package", these commands produce for example "\usepackage{geometry}". The second column represents additional arguments.

AMS math		AMS math
bib latex	[style=authoryear]	biblatex
colour		color
geometry		geometry
hyper ref		hyperref
graphic X		graphicx
math tools		mathtools
multi col		multicol
long table		longtable
tabular X		tabularx
X color		xcolor
wrap figure		wrapfig

5 Environments

Prefixed by "begin", these commands produce for example
"\begin{abstract}

\end{abstract}".
The third column represents additional arguments.

abstract	abstract	
add margin	addmargin	
center	center	
columns	columns	
description	description	
document	document	
(enumerate — numbered list)	enumerate	
equation	equation	
figure	figure	[h!]
flush left	flushleft	
flush right	flushright	
frame	frame	
(list — itemise)	itemize	
mini page	minipage	
multi (cols — columns)	multicols	{2}
quotation	quotation	
quote	quote	
table	table	[h!]
long table	longtable	{lll}
tabular	tabular	{llll}
tabular X	tabular X	{l X}
title page	titlepage	
verbatim	verbatim	
verse	verse	
wrap figure	wrapfigure	

6 Commands

All of these commands are prefixed with "insert".

6.1 With arguments

These commands finish in a set of curly brackets, ready for an argument, for example "\author {}"

author	author
[add] bib resource	addbibresource
caption	caption
chapter	chapter
frame title	frametitle
footnote	footnote
footnote text	footnotetext[]
graphics path	graphicspath
[include] graphics	includegraphics[width=1\textwidth]
label	label
new command	newcommand{}[]
paragraph	paragraph
paren cite	parencite
part	part
reference	ref
renew command	renewcommand
sub paragraph	subparagraph
(section — heading)	section
sub (section — heading)	subsection
sub sub (section — heading)	subsubsection
text cite	textcite
[text] bold	textbf
[text] italics	textit
[text] slanted	textsl
title	title
use theme	usetheme

6.2 No arguments

For example "\linebreak".

centering	centering
column	column{0.5\textwidth}
footnote mark	footnotemark[]
horizontal line	hline
line break	linebreak
item	item

make title	maketitle
new page	newpage
no indent	noindent
page break	pagebreak
print bibliography	printbibliography
table of contents	tableofcontents
text backslash	textbackslash
text width	textwidth
vertical line	vline

7 Greek letters

Prefixed by "greek".

alpha	α	
beater	β	
gamma	γ	Γ
delta	δ	Δ
epsilon	ε	
zita	ζ	
eater	η	
theta	θ	Θ
iota	ι	
kappa	κ	
lambda	λ	Λ
mu	μ	
new	ν	
zee	ξ	Ξ
pie	π	Π
row	ρ	
sigma	σ	Σ
tau	τ	
upsilon	υ	Υ
phi	ϕ	Φ
chi	χ	
sigh	ψ	Ψ
omega	ω	Ω

8 Mathematical symbols

Prefixed with "symbol".

square root	$\sqrt{a}$
[generic] root	$\sqrt[n]{a}$
integral	$\int$
double integral	$\iint$
triple integral	$\iiint$
infinity	∞
times	$\times$
divide	$\div$
intersection	$\cap$
union	$\cup$
stop	$.$
sum	$\sum$
product	$\prod$
(direct sum — oh plus)	$\oplus$
(large direct sum — large oh plus)	$\bigoplus$
plus or minus	$\pm$
partial	∂
fraction	$\frac{a}{b}$
binomial	$\binom{a}{b}$
sine	sin
cosine	cos
tangent	tan
secant	sec
cosecant	csc
cotangent	cot
arc sine	arcsin
arc cosine	arccos
arc tan	arctan
hyperbolic sine	sinh
hyperbolic cosine	cosh
hyperbolic cotangent	coth
hyperbolic tangent	tanh
argument	arg
modulus	mod
degree	deg
determinant	det
dimension	dim

exp	$\exp$
GCD	$\gcd$
cat hom	$\hom$
kernel	$\ker$
infimum	$\inf$
supremum	$\sup$
limit	$\lim$
liminf	$\liminf$
(natural (log — logarithm) — log natural)	$\ln$
logarithm	$\log$
max	$\max$
min	$\min$
probability	$\Pr$
[is] not equal [to]	$\neq$
[is] greater [than] [or] equal [to]	$\geq$
[is] less [than] [or] equal [to]	$\leq$
[is] approximately [equal] [to]	$\approx$
proportional [to]	$\propto$
preference less [than]	$\prec$
preference less equals	$\preceq$
preference greater [than]	$\succ$
preference greater equals	$\succeq$
subset	$\subset$
superset	$\supset$
strict subset	$\subsetneq$
strict superset	$\supsetneq$
member	$\in$
(land—logic and)	$\wedge$
logic or	$\vee$
primer	$\prime$
logic not	$\neg$
for all	$\forall$
there exists	$\exists$”
real numbers	$\mathbb{R}$
complex numbers	$\mathbb{C}$
integer numbers	$\mathbb{Z}$
rational numbers	$\mathbb{Q}$
natural numbers	$\mathbb{N}$
left arrow	$\leftarrow$
right arrow	$\rightarrow$
up arrow	$\uparrow$

down arrow	$\downarrow$
left right arrow	$\leftrightarrow$
left	(
right	)
parens	()
dot dot dot	$\ldots$
diagonal dots	$\ddots$
horizontal dots	$\cdots$
vertical dots	$\vdots$