

Package ‘latex2exp’

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Type Package

Title Use LaTeX Expressions in Plots

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Description

Parses and converts LaTeX math formulas to R's plotmath expressions, used to enter mathematical formulas and symbols to be rendered as text, axis labels, etc. throughout R's plotting system.

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URL <http://github.com/stefano-meschiari/latex2exp>

BugReports <https://github.com/stefano-meschiari/latex2exp/issues>

Imports stringr, magrittr

LazyData TRUE

Suggests testthat, knitr, ggplot2, plyr

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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latex2exp	<i>Converts a LaTeX string to a plotmath expression.</i>
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Description

Converts a LaTeX string to a [plotmath](#) expression.

Usage

```
latex2exp(string, output = c("expression", "text", "ast"))
```

Arguments

string	A character vector containing LaTeX expressions. Note that any backslashes must be escaped (e.g. "\$\alpha\$").
output	The returned object, one of "expression" (default, returns a plotmath expression ready for plotting), "text" (returns the expression as a string), and "ast" (returns the tree used to generate the expression).

Value

Returns an expression (see the output parameter).

Examples

```
latex2exp("$\\alpha$")
latex2exp("The ratio of 1 and 2 is $\\frac{1}{2}$")

a <- 1:100
plot(a, a^2, xlab=latex2exp("$\\alpha$"), ylab=latex2exp("$\\alpha^2$"))
```

latex2exp_examples	<i>Plots a number of example LaTeX string, as parsed by latex2exp.</i>
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Description

Plots a number of example LaTeX string, as parsed by [latex2exp](#).

Usage

```
latex2exp_examples()
```

latex2exp_supported	Returns a list of all supported LaTeX symbols and expressions that can be converted with latex2exp .
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Description

Returns a list of all supported LaTeX symbols and expressions that can be converted with [latex2exp](#).

Usage

```
latex2exp_supported(plot = FALSE)
```

Arguments

plot	whether to plot the table (FALSE by default)
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Value

a character vector of supported LaTeX expressions

plot.expression	Plots an expression on the current graphical device.
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Description

Plots an expression on the current graphical device.

Usage

```
## S3 method for class 'expression'
plot(x, ...)
```

Arguments

x	A plotmath expression.
...	Parameters to be passed to the text function.

print.latextoken	<i>Prints out a parsed LaTeX object, as returned by latex2exp(..., output='ast').</i>
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Description

Prints out a parsed LaTeX object, as returned by latex2exp(..., output='ast').

Usage

```
## S3 method for class 'latextoken'
print(x, ...)
```

Arguments

x	The latex2exp object.
...	(ignored)

toString.latextoken	<i>Converts a token created by latex2exp to a string, later to be parsed into an expression (for internal use).</i>
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Description

Converts a token created by latex2exp to a string, later to be parsed into an expression (for internal use).

Usage

```
## S3 method for class 'latextoken'
toString(x, ...)
```

Arguments

x	The latex2exp token
...	Additional arguments (ignored)

Value

A string

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