Package 'latex2exp'

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Type Package

Title Use LaTeX Expressions in Plots

Version 0.4.0

Date 2015-11-30

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, rmarkdown

VignetteBuilder knitr

RoxygenNote 5.0.1

NeedsCompilation no

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R topics documented:

`latex2exp` *Converts a LaTeX string to a* `plotmath` *expression. Deprecated; use* `TeX` *instead.*

Description

Converts a LaTeX string to a `plotmath` expression. Deprecated; use `TeX` instead.

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).

`latex2exp_examples` *Plots a number of example LaTeX string, as parsed by* `TeX`.

Description

Plots a number of example LaTeX string, as parsed by `TeX`.

Usage

```
latex2exp_examples()
```

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

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)

Value

a character vector of supported LaTeX expressions

plot.expression — *Plots an expression on the current graphical device.*

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

Description

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

Usage

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

Arguments

x	The latex2exp object.
...	(ignored)

TeX *Converts a LaTeX string to a* plotmath *expression.*

Description

Converts a LaTeX string to a plotmath expression.

Usage

```
TeX(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

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

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

`toString.latextoken` *Converts a token created by TeX() to a string, later to be parsed into an expression (for internal use).*

Description

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

Usage

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

Arguments

`x`	The TeX() token
`...`	Additional arguments (ignored)

Value

A string

Index