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
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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**

```r
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**

```r
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**

```r
## 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**

```r
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**

```r
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).

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**Description**

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

**Usage**

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

**Arguments**

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

**Value**

A string
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