

# Package ‘mathpix’

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**Title** Support for the 'Mathpix' API (Image to 'LaTeX')

**Version** 0.6.0

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**Description** Given an image of a formula (typeset or handwritten) this package provides calls to the 'Mathpix' service to produce the 'LaTeX' code which should generate that image, and pastes it into a (e.g. an 'rmarkdown') document. See <<https://docs.mathpix.com/>> for full details. 'Mathpix' is an external service and use of the API is subject to their terms and conditions.

**Depends** R (>= 3.3.0)

**License** GPL (>= 3)

**Encoding** UTF-8

**URL** <https://github.com/jonocarroll/mathpix>

**BugReports** <https://github.com/jonocarroll/mathpix/issues>

**Suggests** testthat, covr

**RoxygenNote** 7.2.1

**Imports** purrr, base64enc, httr, rstudioapi, magick, utils

**NeedsCompilation** no

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**Repository** CRAN

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credentials	<i>Detect mathpix credentials</i>
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**Description**

Checks environmental variables for MATHPIX\_APP\_ID and MATHPIX\_APP\_KEY values.

**Usage**

```
credentials()
```

**Value**

a list of detected credentials (or this package's credentials)

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get_api_key	<i>Get a mathpix API key</i>
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**Description**

Get a mathpix API key

**Usage**

```
get_api_key()
```

**Value**

NULL (invisibly). Used for the side-effect of opening a browser.

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mathpix	<i>Convert an image of an equation to a 'LaTeX' expression</i>
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**Description**

Given an image file location, mathpix performs the relevant transformations and send the data to the 'Mathpix' API, which returns a 'LaTeX' expression which should generate the typeset equation/expression in that image. When using 'RStudio', the resulting 'LaTeX' expression is automatically inserted into the current rmarkdown document.

**Usage**

```
mathpix(img, insert = TRUE, retry = FALSE)
```

**Arguments**

img	image to be converted to LaTeX
insert	Should the resulting LaTeX block be inserted into the document (default: TRUE)
retry	If Mathpix is not able to process the image, should we try again with a re-processed image?

**Details**

You must save your own API key in your environment (e.g. ~/.Renviron) with the identifiers MATHPIX\_APP\_ID and MATHPIX\_APP\_KEY. This can be tested with `mathpix::credentials()`.

**Value**

(invisibly) the rmarkdown LaTeX equation block

**References**

<https://mathpix.com/>

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render_latex	<i>Convert a 'LaTeX' expression to an image (render)</i>
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**Description**

This calls `tex_preview` to render a 'LaTeX' expression into an image, either as a temporary file or saved to disk.

**Usage**

```
render_latex(latex, fileDir = NULL, ...)
```

**Arguments**

latex	'LaTeX' code to be evaluated. Surround in \$ or \$\$.
fileDir	directory in which to save the image to (defaults to <code>'/tmp/tempfile()'</code> ).
...	other options to pass to <code>tex_preview</code> .

**Value**

NULL (invisibly)

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