The **wrapstuff** Package

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1.   Basic Usage

The wrapstuff package provides an alternative way for arranging the layout of images and text. The wrapstuff package tries to combine and extend the functionality of packages such as picinpar, floatflt, wrapfig, cutwin or wrapfig2. This package is compatible with the caption package, the float package and the floatrow package and aims at being compatible with (display) math environments as well as the various LaTeX environments for typesetting tables, which it can wrap properly.
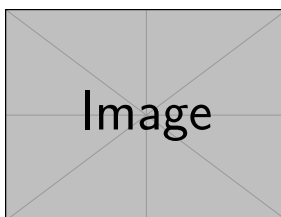
The implementation of the wrapstuff package relies on the paragraph hook management provided by LaTeX 2021-06-01 or later. It requires LaTeX3 2022-04-10 or later.

wrapstuff
```
\begin{wrapstuff}[⟨options⟩]
⟨contents to be wrapped⟩
\end{wrapstuff}
⟨wrapped text⟩
```

The wrapstuff package only provides the wrapstuff environment, which will let the following paragraph wrap around its contents. For example:

```
\begin{wrapstuff}[c,top=1]
  \includegraphics[width=\dimeval{\linewidth/4}]{example-image.pdf}
\end{wrapstuff}
\lipsum[2]
```

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

\wrapstuffset
```
\wrapstuffset {⟨option list⟩}
```

Options to the wrapstuff package can be set when loading the package with the \usepackage macro as well as later using \wrapstuffset. The followig options are available:

top
⟨n⟩
```
top = ⟨non-negative integer⟩
```
This option sets the line number where the wrapping should start. The option can take any non-negative integer ⟨n⟩. The initial value is 0。

___
`width` `width = ⟨dimension⟩`

This option sets the width. The initial value is $0\,\mathrm{pt}$, denoting the natural width of the contents of the `wrapstuff` environment. Using the initial value of $0\,\mathrm{pt}$, the contents of the `wrapstuff` environment can only take one line and may not contain \\ for inserting linebreaks or \par to split paragraphs. If you want to break lines or put several paragraphs into the `wrapstuff` environmentment, the option `width` must be set to an appropiate dimension.

___
`height` `height = ⟨dimension⟩`

This option sets the height of the wrapped content. The initial value is $0\,\mathrm{pt}$, denoting the natural height of the contents of the `wrapstuff` environment.

___
`lines` `lines = ⟨integer⟩`

This option sets the number of lines the wrapped contents should cover. It takes any integer. The initial value is empty, which means that the number of lines is calculated from the contents of the `wrapstuff` environment.

___
`linewidth` `linewidth = ⟨dimension⟩`

This option sets the line width of the surrounding text. The initial value is \linewidth. This option needs not to be changed in general.

___
`l` `l/r/c/i/o`
`r` `ratio = ⟨real number⟩`
`c`
`i`   These options are used to set the arrangement of the contents of the `wrapstuff` environment
`o`   relative to the surrounding text. The options `l/r/c/i/o` set the alignment of the contents of
`ratio` the `wrapstuff` environment such that it sits on the left side, the right side, in the center, on
the inner side or on the outer side of the surrounding text respectively. The option `ratio` sets the ratio of the width of the part of the surrounding text that wraps around the left side. It can be set to any sensible real number within the range $[0, 1]$. The options `i/o` can be used together with the option `ratio`. The initial value is `r`, which means that the contents of the `wrapstuff` environment sits on the right side and the surrounding text wraps around the left side.

___
`column` `column = ⟨true|false|par⟩`

This option contols whether the contents of the `wrapstuff` environment should be wrapped by text that is split over two columns. Setting this option to `true` only works if the option `c` is set or the option `ratio` is set to a value other than 0 or 1. `false` means that the characters of the surrounding text are typeset from the left to the right for each line. `par` means sets the unit for typesetting columns to paragraphs. Compare the below example:

Frère Jacques, Frère Jacques,
Dormez-vous? Dor-   Sonnez les matines!
mez-vous?   Sonnez les matines!
Ding, dang, dong. Ding, dang, dong.
Frère Jacques, Frère Jacques,
Dormez-vous? Dor-   mez-vous?
Sonnez les matines!   Sonnez les matines!
Ding, dang, dong. Ding, dang, dong.
Frère Jacques, Frère   Jacques,
Dormez-vous? Dor-   mez-vous?
Sonnez les matines! Sonnez les matines!
Ding, dang, dong. Ding, dang, dong.

```
\begin{wrapstuff}[c,1]
  \IMAGE{2em}{a}
\end{wrapstuff}
\EXAMPLE
\begin{wrapstuff}[c,1,column=par]
  \IMAGE{2em}{b}
\end{wrapstuff}
\EXAMPLE
\begin{wrapstuff}[c,0,column=false]
  \IMAGE{2em}{c}
\end{wrapstuff}
\EXAMPLE
```

`leftsep`	`leftsep  = ⟨dimension⟩`
`rightsep`	`rightsep = ⟨dimension⟩`
`hsep`	`hsep     = ⟨dimension⟩`

These options set the width of the margin to the right and left of the contents of the `wrapstuff` environment to separate it from the surrounding text. The option `hsep` sets the same value for `leftsep` and `rightsep`. The initial value is 1 em.

`abovesep`	`abovesep = ⟨dimension⟩`
`belowsep`	`belowsep = ⟨dimension⟩`
`vsep`	`vsep     = ⟨dimension⟩`

These options set the width of the margin above and below the contents of the `wrapstuff` environment to separate it from the surrounding text. The option `vsep` sets the same value for `abovesep` and `belowsep`. The initial value is 0 pt.

`hoffset`	`hoffset = ⟨dimension⟩`

This option sets the length of the horizontal offset the contents of the `wrapstuff` environment should extend over the text margin. If the option `c` is set or the option `ratio` is set to a number other than 0 or 1, this option has no effect. A specific value for `\width` can be used to set the total width of the contents of the `wrapstuff` environment and the relevant offset. Setting `hoffset` to the value of `\width` will completely shift the contents of the `wrapstuff` environment outside the text margin. The initial value is 0 pt.

`voffset`	`voffset = ⟨dimension⟩`

This option can be used to control the vertical positioning of the contents of the `wrapstuff` environment. The initial value is 0 pt。

`type`	`type = ⟨type of floating environment⟩`

This option controls the type of the floating environment that should be used for the contents of the `wrapstuff` environment. The initial value is empty. If the `\caption` macro should be used inside the `wrapstuff` environment, the value of the `type` option should be set to `figure` or `table` (or the type of the relevant floating environment that is used) and the `width` option should be set to a specific length.

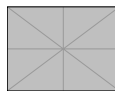Frère Jacques, Frère Jacques, Dormez-vous ? Dormez-vous ?

Figure 1   Example

```
\begin{wrapstuff}[type=figure,width=9em]
  \centering
  \IMAGE{4em}{plain}
  \caption{Example}
\end{wrapstuff}
\EXAMPLE
```

Sonnez les matines ! Sonnez les matines ! Ding, dang, dong. Ding, dang, dong.

`\wrapstuffclear`	

If the line count of the current paragraph of the surrounding text is not sufficient to fully enclose the contents of the `wrapstuff` environment, the wrapping will continue in the following paragraph. This may lead to some unwanted outcomes. If `\wrapstuffclear` is used before the following paragraph, this standard behavior that the wrapping continues is cancelled.

2.   Implementation

Please refer to the Chinese manual for information about the implementation of this package.