

# The $\text{\LaTeX}$ package `showexpl`

## Examples

|    |   |   |
|----|---|---|
| 1  | The <b>overhang</b> parameter . . . . .                                     | 1 |
| 2  | The <b>wide</b> parameter . . . . .   | 1 |
| 3  | The <b>overhang</b> parameter again . . . . .                               | 2 |
| 4  | The <b>wide</b> parameter again . . . . .                                   | 2 |
| 5  | Floating Example . . . . .  | 3 |
| 6  | The <b>graphic</b> parameter . . . . .                                      | 4 |
| 7  | Fix width of the result (side-by-side default: <code>0.5\linewidth</code> ) | 5 |
| 8  | The <b>varwidth</b> parameter . . . . .                                     | 5 |
| 9  | Fix width of the result (default: <code>\linewidth</code> ) . . . . .       | 5 |
| 10 | The <b>justification</b> parameter . . . . .                                | 5 |

## The `listings` parameters still works

$\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$

```
\Large\LaTeX{} \LaTeX{}
\LaTeX{} \LaTeX{}

```

half text area
half text area
margin area

## The **pos**, **overhang**, and **caption** parameters

**Example 1:** The **overhang** parameter

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

$\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$

half text area
half text area
margin area

$\text{\LaTeX}$     $\text{\LaTeX}$     $\text{\LaTeX}$   
 $\text{\LaTeX}$

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

half text area
half text area
margin area

## The **wide** parameter with inner and outer position

**Example 2:** The **wide** parameter

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

$\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$

half text area
half text area
margin area

$\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$   $\text{\LaTeX}$

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

## More examples on an even (left) page

L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

|—— margin area ——| |—— half text area ——| |—— half text area ——|

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X

**Example 3:** The `overhang` parameter again

|—— margin area ——| |—— half text area ——| |—— half text area ——|

L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X  
L<sup>A</sup>T<sub>E</sub>X

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

|—— margin area ——| |—— half text area ——| |—— half text area ——|

L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

**Example 4:** The `wide` parameter again

|—— margin area ——| |—— half text area ——| |—— half text area ——|

```
1 \Large\LaTeX{} \LaTeX{}
2 \LaTeX{} \LaTeX{}

```

L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X

**Example 5:** This is a floating Example (parameter `rangeaccept=true`)

```
1 Line 3 \par
2 Line 4 \par
3 Line 5 \par
4 Line 6 \par
5 Line 8 \par
6 Line 9 \par
7 Line 10 \par
```

```
Line 3
Line 4
Line 5
Line 6
Line 8
Line 9
Line 10
```

Whole  $\text{\LaTeX}$  documents as example code and the parameters **preset**, **rframe**, and **rangeaccept**

```
1 \documentclass[a4paper,twoside]{article}
2 \begin{document}
3   \begin{equation}
4     \sigma(t)=\frac{1}{\sqrt{2\pi}}
5     \int_0^t e^{-x^2/2} dx
6   \end{equation}
7 \end{document}
```

$$\sigma(t) = \frac{1}{\sqrt{2\pi}} \int_0^t e^{-x^2/2} dx \quad (1)$$

\_\_\_\_\_ half text area \_\_\_\_\_ | \_\_\_\_\_ half text area \_\_\_\_\_ | \_\_\_\_\_ margin area \_\_\_\_\_

$$H_c = \frac{1}{2n} \sum_{l=0}^n (-1)^l (n-l)^{p-2} \sum_{l_1+\dots+l_p=l} \prod_{i=1}^p \binom{n_i}{l_i} \cdot [(n-l) - (n_i - l_i)]^{n_i - l_i} \cdot \left[ (n-l)^2 - \sum_{j=1}^p (n_i - l_i)^2 \right]. \quad (2)$$

```
1 \documentclass[a4paper,twoside]{
  article}
2 \usepackage{amsmath}
3 % enhancements for mathematical
  formulas
4 \begin{document}
5 \begin{equation}\label{eq:barwq}
6 \begin{split}
7   H_c&=\frac{1}{2n}
8   \sum_{l=0}^n (-1)^l (n-l)^{p-2}
9   \sum_{l_1+\dots+l_p=l} \prod_{i=1}^p \binom{n_i}{l_i} \\
10  &\quad \cdot [(n-l) - (n_i - l_i)]^{n_i - l_i} \cdot
11  \quad \left[ (n-l)^2 - \sum_{j=1}^p (n_i - l_i)^2 \right].
12 \end{split}
13 \end{equation}
14 \end{document}
```



Using a graphic as the result

1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}

L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X L<sup>A</sup>T<sub>E</sub>X

1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}



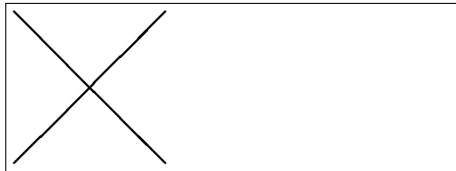
1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}



Example 6: The graphic parameter

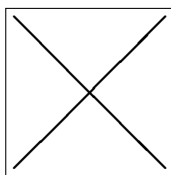
## The parameter **varwidth**

\_\_\_\_\_ half text area \_\_\_\_\_ | \_\_\_\_\_ half text area \_\_\_\_\_ | \_\_\_\_\_ margin area \_\_\_\_\_



```
1 \setlength{\unitlength}{1cm}
2 \begin{picture}(2,2) \
  thicklines
3 \thicklines
4 \put(0,0){\line(1,1){2}}
5 \put(0,2){\line(1,-1){2}}
6 \end{picture}
```

**Example 7:** Fix width of the result (side-by-side default: `0.5\linewidth`)



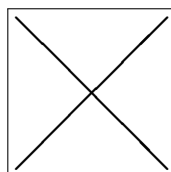
```
1 \setlength{\unitlength}{1cm}
2 \begin{picture}(2,2) \thicklines
3 \put(0,0){\line(1,1){2}}
4 \put(0,2){\line(1,-1){2}}
5 \end{picture}
```

**Example 8:** Width of the result reduced to the “natural” width (`varwidth=true`)



```
1 \setlength{\unitlength}{1cm}
2 \begin{picture}(2,2) \thicklines
3 \put(0,0){\line(1,1){2}}
4 \put(0,2){\line(1,-1){2}}
5 \end{picture}
```

**Example 9:** Fix width of the result (default: `\linewidth`)



```
1 \setlength{\unitlength}{1cm}
2 \begin{picture}(2,2)
3 \thicklines
4 \put(0,0){\line(1,1){2}}
5 \put(0,2){\line(1,-1){2}}
6 \end{picture}
```

**Example 10:** Result is centered (`varwidth=true`)