

# The L<sup>A</sup>T<sub>E</sub>X package `showexpl`

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## The `listings` parameters still works

```
LATEX LATEX LATEX 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{}
```

```
LATEX LATEX LATEX LATEX
```

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

```
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

```
[LATEX LATEX LATEX LATEX] [1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}]
```

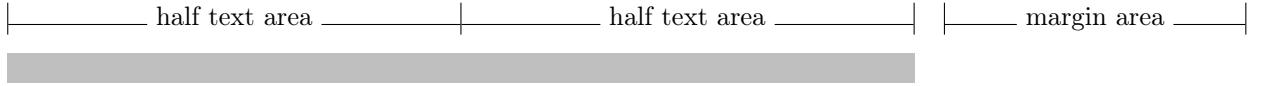
margin area | half text area | half text area

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

## More examples on an even (left) page

```
LATEX LATEX LATEX LATEX
```

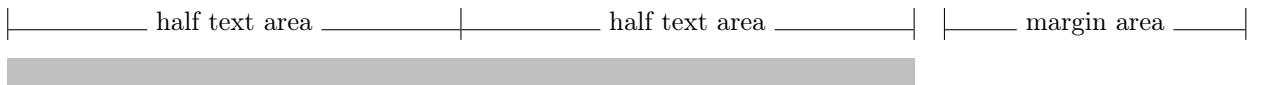
```
1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}
```



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

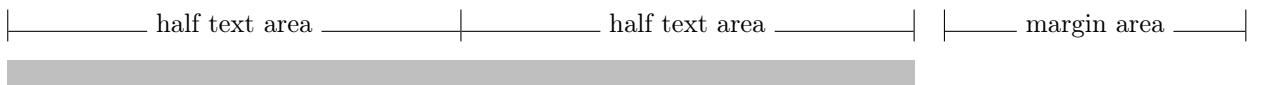
```
LATEX LATEX LATEX LATEX
```

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



```
LATEX LATEX LATEX LATEX
```

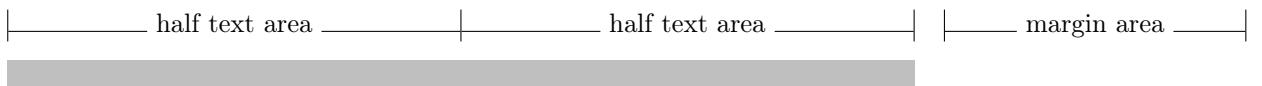
```
1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}
```



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

```
LATEX LATEX LATEX LATEX
```

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



```
LATEX LATEX LATEX LATEX
```

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

**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 L<sup>A</sup>T<sub>E</sub>X 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}} e^{-x^2/2}
5     \int_{t_0}^t e^{-x^2/2} dx
6   \end{equation}
7 \end{document}

```

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

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

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

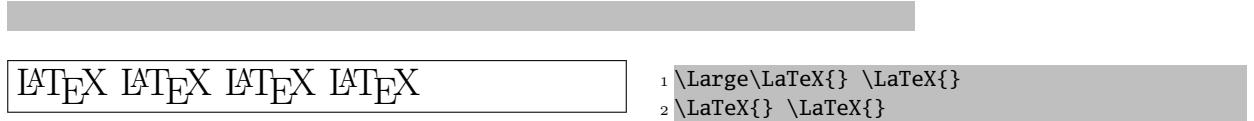
```

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  &\binom{n_i}{l_i} \cdot \Big[ (n-l) - (n_i - l_i) \Big]^{n_i - l_i} \\
11  &\quad \& \quad \cdots \\
12  &\quad \Big( (n-1) - (n_{i-1} - l_{i-1}) \Big)^{n_{i-1} - l_{i-1}} \\
13 \end{split}
14 \end{equation}
15 \end{document}

```

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

### Using a graphic as the result



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



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

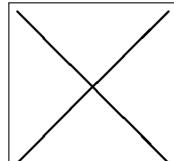


```
1 \Large\LaTeX{} \LaTeX{}  
2 \LaTeX{} \LaTeX{}
```

**Example 6:** The `graphic` parameter

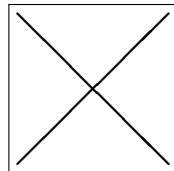
## The parameter **varwidth**

margin area | half text area | half text area |



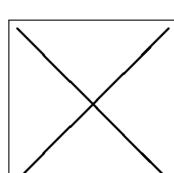
```
1 \setlength{\unitlength}{1cm}
2 \begin{picture}(2,2) \thicklines
3   \put(0,0){\line(1,1){2}}
4   \put(0,2){\line(1,-1){2}}
5 \end{picture}
```

**Example 7:** Fix width of the result (side-by-side default:  $0.5\text{\ linewidth}$ )



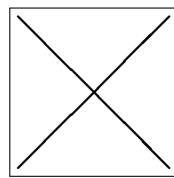
```
1 \setlength{\unitlength}{1cm}
2 \begin{picture}(2,2) \thicklines
3   \put(0,0){\line(1,1){2}}
4   \put(0,2){\line(1,-1){2}}
5 \end{picture}
```

**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:  $\text{\ linewidth}$ )



```
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`)