

# rwth-ci – L<sup>A</sup>T<sub>E</sub>X using the Corporate Design of RWTH Aachen\*

Marei Peischl<sup>†</sup>

v1.0a from 2025-12-27

## Contents

<b>I</b>	<b>Global configuration and auxiliary packages</b>	<b>2</b>
1	General configuration options	2
2	RWTH-CI specific title elements	3
3	Font configuration – <b>rwth-fonts.sty</b>	3
4	Color setup – <b>rwth-colors.sty</b>	3
	4.1 Package specific options . . . . .	4
<b>II</b>	<b>Document Types</b>	<b>5</b>
1	Letters – <b>rwth-letter.sty</b>	5
	1.1 Package specific options . . . . .	5
	1.2 Additional KOMA variables defined for RWTH-CI . . . . .	5
2	Beamer Slides – <b>rwth-beamer.cls</b>	6
	2.1 Class specific options . . . . .	6
	2.2 Class specific commands . . . . .	6
3	Scientific Posters – <b>rwth-sciposter.cls</b>	6
	3.1 Additional title elements . . . . .	6
	<b>Index</b>	<b>7</b>

---

\*This file describes version v1.0a, last revised 2025-12-27.

<sup>†</sup>Email: [rwth-ci@peitex.de](mailto:rwth-ci@peitex.de)

# Part I

## Global configuration and auxiliary packages

### 1 General configuration options

`logfile=` (*file name/path*) (default: `rwth_mx`)

Is used to configure specific logos. The logos are reserved to be used by RWTH departments and may therefore not be published within this bundle.

Depending on the color mode (see [subsection 4.1](#)) the actual file searched for will be extended by the suffices `_cmyk` or `_rgb`. Within this document the file `rwth_mx_cmyk` was used.

`logfile-ext=` (*extension*) (default: `.pdf`)

`accept-missing-logos=` (*boolean*) (default: `false` but switched to `true`, if no logfile is selected)

As the logo files sadly may not be published within this bundle, the default setting allows all files to be compiled without a logo. There will be a warning and the logo position will be marked showing the desired filename.

`department=` (*department*) (default: `default`)

RWTH-CI supports department specific configuration files. The is used to detect if a user specific setting was provided.

`departmentconfigprefix=` (*prefix*) (default: `rwth-`)

By default this setting will search for files called `rwth-department.cfg`, where `rwth-` can be changed using `departmentconfigprefix`. This option could also be used to load config files from specific subdirectories. This might be useful if a specific department wants some internal templates to be shared separately.

`colormode=` (`RGB/cmyk`) (default: `depends on document type`)

Selects the color scheme to be converted to. This will also affect the logo selection.

`logo=` (`top/bottom`) (default: `top`)

Allows to change the logo position. This option is currently only supported by the `rwth-sciposter`.

`raggedright=` (*boolean*) (default: `true`)

The CI requires all text to be set ragged right. This option can be used to disable this setting to avoid conflicts with additional packages or configuration to adjust the placement of elements. In general this setting will be enabled at `\begin{document}` but for `rwth-letter` the option `letterhooks` allows to limit this setting for the letter environment.

`titlegraphic=` (`1:3,2:3,false`) (default: `1:3`)

The titlegraphic can be used in different sizes. This option is currently only supported by `rwth-beamer`.

This option can be changed locally. Therefore the `\titlepage` command was extended to accept an optional argument.

```
\titlepage[titlegraphic=1:3]
```

`titlesepline=` (*boolean*) (default: `false`)

This option is currently only supported by `rwth-beamer`.

`paper=` (`portrait/landscape`) (default: (*depends on document type*))

The supported paper sizes as well as the default setting depends on the document type. The default values for posters is `and` .

## 2 RWTH-CI specific title elements

All templates except the `rwth-letter`, are configured to use `\title`, `author`, ...for configuration of the title block/page. There are some additional elements which can be used depending on the document type.

`\titlegraphic` Accepts any  $\LaTeX$  content, does not have to be an image. This is placed flush with the top corner in the main part of the title page. This macro is usually used to place a graphic:

```
\titlegraphic{\includegraphics[width=\width]{example-image-plain}}
```

`\width` `\width` and `\height` can be used to select the appropriate size of the image. There also is `\height` a starred variant `\titlegraphic*`, to allow automatic scaling and any necessary clipping to fill the reserved space. This is done automatically using `trimclip`.

```
\titlegraphic*{\includegraphics{example-image-plain}}
```

## 3 Font configuration – `rwth-fonts.sty`

`freefonts=` (*value*) (default: `auto`)

The Corporate Design is using commercial fonts. To allow editing documents also on computers without a valid font license, the option `freefonts` provides a mechanism for this. By default the font selection is configured to try to use the official font if available. And will create a warning if the official setting is not possible.

Please be aware that checking font availability slows down the compilation process. You probably want to set the value to `true` or `false` to speed up.









































`fontdefaults=` (*boolean*) (default: `true`)

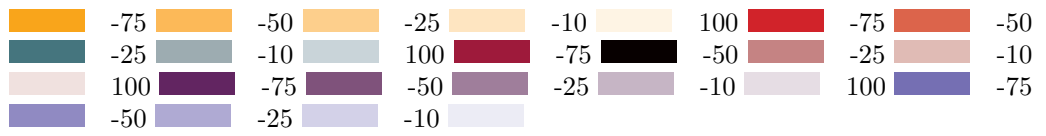
Configure if this package is setting any font defaults or only adds a font family matching the requirements.

## 4 Color setup – `rwth-colors.sty`

The colors setup is done using the `xcolor` package. All mechanisms described in the corresponding documentation may be used.

All design specific colors are defined according to the guideline [1]. The predefined colors are listed below:

<code>rwth-blue</code>	-100		-75		-50		-25		-10		100		
	-75		-50		-25		-10		100		-75		-50
	-25		-10		100		-75		-50		-25		-10
	100		-75		-50		-25		-10		100		-75
	-50		-25		-10		100		-75		-50		-25
	-10		100		-75		-50		-25		-10		100



As one might realize the shadings are defined directly. Those should be used to stick to the CI guideline [1] instead of using the color mixing provided by xcolor.

#### 4.1 Package specific options

`colormode=` cmyk/RGB

Depends on document type

The `colormode` can be selected to overwrite the default setting. Please be aware, that there is a difference in casing and RGB has to be used uppercase and cmyk lowercase. Internally the values between uppercase and lowercase model names would differ.

## Part II

# Document Types

## 1 Letters – `rwth-letter.sty`

The letter package is based on `scrletter` and supports all elements described in the KOMA-Script documentation. The corresponding demo file is called `DEMO-RWTHLetter.tex` and there also is a `lco` file to show a global configuration for address data.

### 1.1 Package specific options

`letterheadfile=` (*file name/path*) (initially unset)

There are logo files including the blue separation line for letters. These have to be scaled differently. This option allows to select those by passing it to the global `logo` option and will adjust the scaling accordingly. The demo logo repository provides the file `rwth_briefkopf_cmyk.pdf` which could be enabled using the following setting:

```
\usepackage[
  letterheadfile=rwth_briefkopf
]{rwth-letter}
```

`letterhooks=` (*boolean*) (default: false)

Add support for different document configuration which does not match the RWTH-CI settings outside of letters.

`grayscale=` (*boolean*) (default: false)

Can be used to create the non-colored letter layout. This will use `xcolor`'s gray color model and convert all colors within the letter. If `letterhooks` is not enabled this would affect the whole document.

`payment-data=` (*boolean*) (default: false)

`textwidth=` (*narrow/wide*) (default: narrow)

Switch between the two available letter layouts.

### 1.2 Additional KOMA variables defined for RWTH-CI

The letter template requires some additional variables:

**frominstitution** institute/department/group

**frominstitution-short** Abbreviated version of `frominstitution` to be used in the back-address

**frominstitution-id** identifier to be placed right of the backaddress

**fromfunction** position or job title of the sender

**fromoffice** building and room number

**fromvat** VAT ID

`fromtax` Tax ID

The RWTH Letter layout also allows to add a second sender. Therefore this bundle provides also the KOMA variables `fromname2` and `fromfunction2`. Using more than 2 persons is not allowed.

The same applies for `frombank` here `frombank2` and `frombank3` have been added.

## 2 Beamer Slides – `rwth-beamer.cls`

The slide layout for RWTH-CI is based on the beamer class. There is a corresponding wrapper class, which should be preferred over loading the beamer theme. The demo file for this document type is called `DEMO-RWTHBeamer.tex`.

### 2.1 Class specific options

`titlepage= (graphics,plain)` (default: `graphics`)

Use the title variant without colored area or titlegraphic.

### 2.2 Class specific commands

`\footlinetext` `{\Additional text to be placed in the footline}`

## 3 Scientific Posters – `rwth-sciposter.cls`

The Scientific poster template is based on the `tcolorbox` poster library. Please have a look at the corresponding documentation for a full list of configuration options. The demo file corresponding to this is called `DEMO-RWTHSciPoster.tex`.

### 3.1 Additional title elements

The basic title setup using `\title` and `\author` works the same way as it does for standard L<sup>A</sup>T<sub>E</sub>X. RWTH-CI provides some additional commands to extend that data.

`\footerqrcode` Create a QRcode to be placed in the footer. The starred variant allows to use a citekey  
`\contactinfo` for reference. This command is used to set additional contact data for the footer, for example:

```
\contactinfo{
  Telefon: +49 241 80-94123\\
  E-Mail: kim.muster@mx.rwth-aachen.de
}
```

`\addressdata`

```
\addressdata{
  Institut für maximale Ausdehnung der Logosystematik\\
  RWTH Aachen University\\
  Musterstraße 7, 52074 Aachen, GERMANY\\
}
```

## References

- [1] *Corporate Design Manual | RWTH Aachen*. Intern resource. URL: <https://rwth-aachen.de/marketing> (visited on 12/17/2025).

## Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

<b>A</b>	
accept-missing-logos (option) . . . . .	<i>2</i>
\addressdata . . . . .	<i>6</i>
<b>C</b>	
colormode (option) . . . . .	<i>2, 4</i>
\contactinfo . . . . .	<i>6</i>
<b>D</b>	
department (option) . . . . .	<i>2</i>
departmentconfigprefix (option) . . . . .	<i>2</i>
<b>F</b>	
fontdefaults (option) . . . . .	<i>3</i>
\footerqrcode . . . . .	<i>6</i>
\footlinetext . . . . .	<i>6</i>
freefonts (option) . . . . .	<i>3</i>
<b>G</b>	
grayscale (option) . . . . .	<i>5</i>
<b>H</b>	
\height . . . . .	<i>3</i>
\height . . . . .	<i>3</i>
<b>L</b>	
letterheadfile (option) . . . . .	<i>5</i>
letterhooks (option) . . . . .	<i>5</i>
logo (option) . . . . .	<i>2</i>
logfile (option) . . . . .	<i>2</i>
logfile-ext (option) . . . . .	<i>2</i>
<b>O</b>	
options:	
accept-missing-logos . . . . .	<i>2</i>
colormode . . . . .	<i>2, 4</i>
<b>P</b>	
department . . . . .	<i>2</i>
departmentconfigprefix . . . . .	<i>2</i>
fontdefaults . . . . .	<i>3</i>
freefonts . . . . .	<i>3</i>
grayscale . . . . .	<i>5</i>
letterheadfile . . . . .	<i>5</i>
letterhooks . . . . .	<i>5</i>
logo . . . . .	<i>2</i>
logfile . . . . .	<i>2</i>
logfile-ext . . . . .	<i>2</i>
paper . . . . .	<i>3</i>
payment-data . . . . .	<i>5</i>
raggedright . . . . .	<i>2</i>
textwidth . . . . .	<i>5</i>
titlegraphic . . . . .	<i>2</i>
titlepage . . . . .	<i>6</i>
titlesepline . . . . .	<i>3</i>
<b>P</b>	
paper (option) . . . . .	<i>3</i>
payment-data (option) . . . . .	<i>5</i>
<b>R</b>	
raggedright (option) . . . . .	<i>2</i>
<b>T</b>	
textwidth (option) . . . . .	<i>5</i>
\titlegraphic . . . . .	<i>3</i>
titlegraphic (option) . . . . .	<i>2</i>
\titlegraphic* . . . . .	<i>3</i>
titlepage (option) . . . . .	<i>6</i>
titlesepline (option) . . . . .	<i>3</i>
<b>W</b>	
\width . . . . .	<i>3</i>
\width . . . . .	<i>3</i>