

# **IWBlatex**Documentation



https://gitlab.lrz.de/AM/TUMlatex

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# **Chapter 1**

# Introduction

# 1.1 The TUMlatex Project

The TUMlatex project represents a cooperation of several chairs of the Technical University of Munich to provide a compact and easy-to-use LaTeX package for both, employees and students. The whole project is hosted on the GitLab server of the LRZ and can be accessed via https://gitlab.lrz.de/AM/TUMlatex.

If you are an advanced LaTeX user and want to contribute to this project, please read the contribution guide available on the GitLab project page. If you are responsible for the LaTeX templates of your chair and you are interested in joining this collaboration, please contact the current maintainer Michael Kreutz (m.kreutz@tum.de).

This documentation is intended to assist users during the creation of documents. It does **not** contain information on how to set up your LaTeX environment. For detailed instructions on how to prepare your environment for usage with this class, be referred to the GitLab project page.

# 1.2 Modules, Styles and Templates

In order to maintain a clear and modular structure, the concept of modules, styles and templates has been chosen. While modules and styles are fused into one single class or package file (.cls or .sty), templates do not interfere with each other.

#### 1.2.1 Modules

Each module bundles several LaTeX packages, definitions and commands which can be used if the corresponding module has been activated. Modules implement the core functionality of this project. Modules can be activated by passing the option IWB<module name> to the main class, e.g. by writing \documentclass[IWBcore, IWBlang]{IWBlatex}. If you pass no options related to modules, e.g. by writing \documentclass{IWBlatex}, the class will automatically load all modules. This should be the usual case. However you are free to deactivate modules, for example because the journal you want to publish your paper in does not allow certain packages to be loaded.

Also there are specific dependencies between modules, see chapter 2 for individual details. Note that if you select a specific module, its dependencies will be activated automatically. Selecting the module <a href="IWBfont">IWBfont</a> will thus also activate the module <a href="IWBcore">IWBcore</a>. Use \IWBdebug to print a list of all enabled modules.

#### 1.2.2 Styles

Styles extend the core functionality of modules by defining styling options for different document types. For example there is a different style for a student thesis than for a lecture script. In contrast both will use the same modules. Styles can be selected in the same way as modules, i. e. by passing the option IWB<style name> to the main class, e.g. by writing \documentclass[IWBempty]{IWBlatex}. It is important to note that

• exactly one style per document has to be selected,

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• the style IWBempty is automatically selected, if the user passes no options related to styles, e.g. by writing \documentclass{IWBlatex} and

• if a style is explicitly selected, all modules will be loaded automatically (independent of your module choice).

As a consequence you must not specify any style in order to be able to select modules.

#### 1.2.3 Templates

In order to simplify the usage of the class, a variety of templates is given. Those can be copied (complete folder) to create a new document without any knowledge how to use the main class. Thus a template demonstrates the main functionality which is usually needed for this type of document. You just have to edit the template and insert your content.

# 1.3 Folder Structure

The (compiled) package folder is structured as follows:

- IWBDocumentation (source and compiled files of this document)
- *IWBTemplates* (source and precompiled template files)
- IWBTools (useful scripts and tools)
- *IWBlatex.cls* (main class file)
- IWBlatex.cwl (syntax file used for auto-completion in TeXstudio)
- IWBlatex.sty (main package file)
- *IWBlatex LICENSE.txt* (license information of the package)

In order to create a new document just copy the appropriate template (complete folder) from *IWBTemplates* to anywhere you want. Then edit the file *main.tex*.

# 1.4 The IWBlatex Project

The IWBlatex project is a subproject related to the Institute for Machine Tools and Industrial Management (iwb). It includes the complete functionality of the TUMlatex base package as well as additional chair-specific modules, styles and templates.

# **Chapter 2**

# **Modules**

# 2.1 IWBcore

Dependencies	none				
Options	none				
Loaded Packages	inputenc etoolbox xparse silence soul				
Sourcefile	source/MW/IWB/Modules/IWBcore.sty				
Sourcefile (parent)	source/TUM/Modules/TUMcore.sty				
Commands	\IWBcoreLogInfo \IWBcoreLogWarning \IWBcoreLogError \IWBcoreRepetition \IWBcoreProjectWebsite				

# **Description**

The IWBcore-module is the most important module since it plays a major role in the building process of the class. It helps filtering warnings and debugging the whole document. For more information related to the commands of this module look up chapter 5. The results of the debugging process are written to the log file (*main.log*).

There are also basic control structures implemented. You can use the command \IWBcoreRepetition as simple implementation of a for-loop.

#### 2.2 IWBfont

Dependencies	IWBcore				
Options	optHelvetica optArial optCharter optComputerModern optCharterMath				
	optComputerModernMath				
Loaded Packages	fix-cm fontenc helvet uarial charter mathdesign anyfontsize				
Sourcefile	source/MW/IWB/Modules/IWBfont.sty				
Sourcefile (parent)	source/TUM/Modules/TUMfont.sty				
Commands	\  \  \WBfontSetDocumentFontSizeVI \  \\ \WBfontSetDocumentFontSizeVII \  \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\				

#### **Description**

The module IWBfont loads all requested fonts and symbols. There are four different "text" fonts available. If you do not select one of them optHelvetica, or a font specified by the chosen style, will be used as default. The same applies to the two math options, which define the "mathematical" font. The default "mathematical" font is optCharterMath.

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Option	Sans Serif	Roman	Typewriter	
optHelvetica	<b>Helvetica</b> (phv)	Charter (bch)	Com. Mod. (cmtt)	
optArial	URW Arial (ua1)	Charter (bch)	Com. Mod. (cmtt)	
optCharter	Helvetica (phv)	Charter (bch)	Com. Mod. (cmtt)	
optComputerModern	Com. Mod. (cmss)	Com. Mod. (cmr)	Com. Mod. (cmtt)	

Note that URW Arial is **not** included in standard LTEX distribution like TeXLive, thus it will only be loaded if the option optArial is given explicitly. You probably have to install this font manually for your system.

**Hint:** You can switch between sans serif, roman and typewriter font easily with the standard LaTeX commands \sffamily, \rmfamily and \ttfamily respectively.

# **Font Families**

The following table shows examples for the different font options.

Helvetica (sans serif only)	Example Text 1 2 3 A B C a b c				
Charter (roman only)	Example Text 1 2 3 A B C a b c				
Computer Modern (sans serif)	Example Text 1 2 3 A B C a b c				
Computer Modern (roman)	Example Text 1 2 3 A B C a b c				
Computer Modern (typewriter)	Example Text 1 2 3 A B C a b c				

#### **Fontsizes**

By using the commands of this module (starting with \IWBfontSetDocumentFontSize) you can change the default font size of the whole document. Note that it is also possible to use these commands to switch font sizes within a document.

The package provides following fontsizes

Command	Font Size	Comment
\IWBfontSetDocumentFontSizeVI	6pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeVII	7pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeVIII	8pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeIX	9pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeX	10pt	from standard article-class (original)
\IWBfontSetDocumentFontSizeXI	11pt	from standard article-class (original)
\IWBfontSetDocumentFontSizeXII	12pt	from standard article-class (original)
\IWBfontSetDocumentFontSizeXIII	13pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXIV	14pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXV	15pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXVI	16pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXVIII	18pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXX	20pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXXII	22pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXXIV	24pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXXVIII	28pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXXLII	32pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXXLVI	36pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXL	40pt	scaled from standard article-class
\IWBfontSetDocumentFontSizeXLIV	44pt	scaled from standard article-class

The commands in the following table will be affected by the font size and accordingly adjusted. In this case the commands for the font size 11pt are shown.

A	A	A A		A	
\tiny \scriptsize		\footnotesize	\small	\normalsize	
Α	А	Α	Α	Α	
1 1	7.1	_ <u> </u>			

# 2.3 IWBlang

Dependencies	IWBcore					
Options	optGerman optEnglish					
Loaded Packages	babel csquotes					
Sourcefile	source/MW/IWB/Modules/IWBlang.sty					
Sourcefile (parent)	source/TUM/Modules/TUMlang.sty					
Commands	IWBlangSibliography					

# **Description**

The module IWBlang gives you the ability to change the language of the document. Thereby, you have the choice between German (optGerman) and English (optEnglish). This especially effects predefined headers and titlepages. If no option has been passed, the default language will be German (optGerman). You can also switch the language of the document dynamically (i. e. within the text) with the commands \IWBlangSwitchToGerman and \IWBlangSwitchToEnglish.

Besides it also includes an accumulation of commands, which displays different words or phrases in English or German. These are all listed in chapter 5. Furthermore you can easily create placeholders with the command \IWBlangGerEng where you can specify german and

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english translations. Depending on the document language the german or english text will be displayed automatically.

#### **Dates**

The module also specifies helper commands to typeset dates in the global document language. You can use the commands \IWBlangMonth, \IWBlangMonthShort and \IWBlangmonth to output month names.

# 2.4 IWBaddress

Dependencies	none				
Options	none				
Loaded Packages	none				
Sourcefile	source/MW/IWB/Modules/IWBaddress.sty				
Sourcefile (parent)	source/TUM/Modules/TUMaddress.sty				
Commands	\IWBaddressCityMunich \IWBaddressCityGarching \IWBaddressCityMW \IWBaddressCityIN \IWBaddressCityCIT \IWBaddressCityDepartment \IWBaddressCityChair \IWBaddressPostalCode-Garching \IWBaddressPostalCode-Munich \IWBaddressPostalCodeMW \IWBaddressPostalCodeIN \IWBaddressPostalCodeCIT \IWBaddressPostalCodeDepartment \IWBaddressPostalCodeChair \IWBaddressStreetMW \IWBaddressStreetIN \IWBaddressStreetCIT \IWBaddressStreetDepartment \IWBaddressStreetChair \IWBaddressIBANTUM \IWBaddressIBANMW \IWBaddressIBANIN \IWBaddressIBANCHair \IWBaddressIBANDepartment \IWBaddressIBANCHair \IWBaddressBIC-TUM \IWBaddressBICCHair \IWBaddressBICIN \IWBaddressBICCIT \IWBaddressBICDepartment \IWBaddressBICChair \IWBaddressCreditInstitutionTUM \IWBaddressCreditInstitutionMW \IWBaddressCreditInstitutionNUM \IWBaddressCreditInstitutionDepartment \IWBaddressCreditInstitutionChair \IWBaddressWebsiteTUM \IWBaddressWebsiteMW \IWBaddressWebsiteCIT \IWBaddressWebsiteDepartment \IWBaddressTaxNumberIN \IWBaddressTaxNumberTUM \IWBaddressTaxNumberIN \IWBaddressTaxNumberChair \IWBaddressSalesTaxIDIN \IWBaddres				

# **Description**

The IWBaddress-module defines common strings used in contact information like streets, cities, postal codes, IBANs and BICs. Selected commands:

Command	Output
\IWBaddressCityMunich	Munich
\IWBaddressCityGarching	Garching
\IWBaddressCityChair	Garching
\IWBaddressPostalCodeChair	85748
\IWBaddressStreetChair	Boltzmannstraße 15
\IWBaddressIBANChair	DE10700500000000024866
∖IWBaddressBICChair	BYLADEMM
\IWBaddressCreditInstitutionChair	Bayerische Landesbank
\IWBaddressWebsiteTUM	www.tum.de
\IWBaddressWebsiteDepartment	www.mw.tum.de
\IWBaddressWebsiteChair	www.mw.tum.de/iwb
\IWBaddressTaxNumberChair	143/241/80037
\IWBaddressSalesTaxIDChair	DE811193231

2.5 IWBcolor

# 2.5 IWBcolor

Dependencies	IWBcore				
Options	optRGB optCMYK optGray optMonochrome				
Loaded Packages	xcolor				
Sourcefile	source/MW/IWB/Modules/IWBcolor.sty				
Sourcefile (parent)	source/TUM/Modules/TUMcolor.sty				
Commands	none				

# **Description**

The module IWBcolor defines the official colors of the TUM according to the coorporate design. The main options of this module are optRGB, optCMYK, optGray and optMonochrome, which are different color models. Though CMYK is preferable used for print media and RGB for digital documents. Gray and Monochrome are just different variations of black and white. If no option has been passed, the default option optRGB will be used.

The following tables give an overview over the color definitions.

# **Default Colors:**

Color	R	G	В	С	M	Y	K	Hex	Preview
TUMBlue	0	101	189	100	43	0	0	0x0065BD	
TUMWhite	255	255	255	0	0	0	0	OxFFFFFF	
TUMBlack	0	0	0	0	0	0	100	0x000000	
TUMBlue1	0	51	89	100	57	12	70	0x003359	
TUMBlue2	0	82	147	100	54	4	19	0x005293	
TUMGray1	51	51	51	0	0	0	80	0x333333	
TUMGray2	127	127	127	0	0	0	50	0x7F7F7F	
TUMGray3	204	204	204	0	0	0	20	0xCCCCCC	
TUMBlue3	100	160	200	65	19	1	4	0x64A0C8	
TUMBlue4	152	198	234	42	9	0	0	0x98C6EA	
TUMIvory	218	215	203	3	4	14	8	0xDAD7CB	
TUMOrange	227	114	34	0	65	95	0	0xE37222	
TUMGreen	162	173	0	35	0	100	20	0xA2AD00	

# **Extended Diagram Colors:**

Color	R	G	В	С	M	Y	K	Hex	Preview
TUMDiagPurple	105	8	90	50	100	0	40	0x69085A	
TUMDiagBlue	15	27	95	100	100	0	40	0x0F1B5F	
TUMDiagBlueGreen	0	119	138	100	3	30	30	0x00778A	
TUMDiagGreen1	0	124	48	100	0	100	20	0x007C30	
TUMDiagGreen2	103	154	29	60	0	100	20	0x679A1D	
TUMDiagYellow	255	220	0	0	10	100	0	0xFFDC00	
TUMDiagOrange1	249	186	0	0	30	100	0	0xF9BA00	
TUMDiagOrange2	214	76	19	0	80	100	10	0xD64C13	
TUMDiagRed1	196	7	27	10	100	100	10	0xC4071B	
TUMDiagRed2	156	13	22	0	100	100	40	0x9C0D1B	

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#### 2.6 IWBtikz

Dependencies	IWBcore
Options	optTikzExternalize
Loaded Packages	pdfpages tikz mdframed pgfplots grffile pgfgantt
Sourcefile	source/MW/IWB/Modules/IWBtikz.sty
Sourcefile (parent)	source/TUM/Modules/TUMtikz.sty
Commands	\IWBtikzExternalizeSkipNext \IWBtikzGrid \IWBtikzCircled

#### **Description**

The IWBtikz module implements basic TikZ, pgfplots and pgfgantt funcitonality. The option optTikzExternalize quickens the building process by storing TikZ-graphics in a separate folder (figures/tikzoutput). When rebuilding the document the compiler will take unchanged graphics directly from the external dataset instead of building the graphic again. However, in some cases positioning problems may occur. In this case the module provides a solution by forcing TikZ to skip the externalization of the next graphic by the command \IWBtikzExternalizeSkipNext.

Furthermore the module defines the command \IWBtikzGrid with which a grid can be drawn:



Additionally macros for framing content are defined:

Command	Example(s)
\IWBtikzCircled	(A), $(x)$ , $(1)$

# 2.7 IWBlogo

Dependencies	IWBcore IWBfont IWBcolor IWBlang IWBtikz
Options	none
Loaded Packages	none
Sourcefile	source/MW/IWB/Modules/IWBlogo.sty
Sourcefile (parent)	source/TUM/Modules/TUMlogo.sty
Commands	\IWBlogoTercetTUM \IWBlogoTercetDepartment \IWBlogoTercetChair \IWBlogoTUM \IWBlogoDepartmenttMW \IWBlogoDepartment(IT \IWBlogoDepartment \IWBlogoAnniversary

# **Description**

The IWBlogo module creates the logos of the university and the department as TikZ pictures. By passing parameters to the commands, the size and the color of the logos is specified.



Similar to the logos, also the TUM tercets can be printed in a convenient way:

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Technical University of Munich

TUM School of Engineering and Design Technical University of Munich

Institute for Machine Tools and Industrial Management (iwb) TUM School of Engineering and Design Technical University of Munich

\IWBlogoTercetTUM

\IWBlogoTercetDepartment

\IWBlogoTercetChair

#### 2.8 IWBmath

Dependencies	IWBcore
Options	optLeftEquations optCenterEquations optLimitMathFonts
Loaded Packages	amsmath mathtools siunitx amssymb amsfonts bm
Sourcefile	source/MW/IWB/Modules/IWBmath.sty
Sourcefile (parent)	source/TUM/Modules/TUMmath.sty
Commands	\teal \imag \asin \acos \atan \co \atanll \Atanll \sinabr \cosabr \sign \argmin \argmax \div \grad \curl \rot \dif \Dif \order \Abs \abs \Norm \norm \e \const \konst \laplacian \vdiv \vgrad \vcurl \rot \hex \bin \dec \bnot \MR \MN \MZ \MC \MQ \Mone \eqhat \eqexcl \eqdef \defined \rdefined \vec \vnull \vzero \vone \vnabla \mat \pmat \bmat \bmat \vmat \Vmat \dd \vdot \vdot \diff \tdiff \pdiff \tdiff \bdiff \trs

# **Description**

The IWBmath module defines various math operators, sets of numbers, numeral systems, relations as well as vector and matrix notations. The options optLeftEquations (default) and optCenterEquations allows the user to specify the alignment of equations. The option optLimitMathFonts can be used to limit the number of math fonts that are loaded. This is done by not loading the bm-package, which is otherwise included to improve typesetting bold math symbols.

# **Operators**

Command	Output	Command	Output	Command	Output	Command	Output
\real	Re	\sign	sign	\curl	curl	\dif	d
\imag	Im	\sgn	sgn	\rot	rot	\Dif	D
\asin	asin	\argmin	arg min	\atanII	atan2	\order	O
\acos	acos	\argmax	arg max	\AtanII	Atan2		
\atan	atan	\div	div	∖sinabr	S		
\co	со	∖grad	grad	\cosabr	c		

#### **Miscellaneous**

Command	Output	Command	Output	Command	Output	Command	Output
$Abs\{x\}$	x	\Norm{x}	x	∖konst	konst	\vgrad	$\nabla$
$abs{x}$	x	\norm{x}	x	∖laplacian	$\Delta$	\vcurl	abla imes
\e	e	\const	const	\vdiv	$ abla \cdot$	\vrot	abla imes

# **Numeral Systems and Sets of Numbers**

Command	Output	Command	Output	Command	Output	Command	Output
\hex{123}	123 <sub>H</sub>	\bin{101}	101 <sub>B</sub>	\dec{123}	123 <sub>D</sub>	\bnot{101}	101
\MR	$\mathbb{R}$	\MN	$\mathbb{N}$	\MZ	${\mathbb Z}$	\MC	$\mathbb{C}$
\MQ	$\mathbb{Q}$	\Mone	1				

#### **Relations**

Command	Output	Command	Output	Command	Output	Command	Output
\eqhat	<b>≘</b>	\eqexcl	<u>!</u>	\eqdef	def. =	\defined	:=
\rdefined	=:						

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#### **Derivatives**

Command	Output	Command	Output	Command	Output
$\d$ {x}	d <i>x</i>	\vdot{x}	х	\vddot{x}	ÿ
$\left(\frac{diff[2]{f}{x}}{}\right)$	$\frac{\mathrm{d}^2 f}{\mathrm{d}x^2}$ $\frac{\partial^2 f}{\partial x^2}$	$\tilde{tdiff}[2]{f}{x}$	$\frac{\frac{\mathrm{d}^2 f}{\mathrm{d}x^2}}{\frac{D^2 f}{Dx^2}}$	\pdiff[2]{f}{x}	$\frac{\frac{\partial^2 f}{\partial x^2}}{\frac{D^2 f}{Dx^2}}$
$\t pdiff[2]{f}{x}$	$\frac{\partial^2 f}{\partial x^2}$	$\Ddiff[2]{f}{x}$	$\frac{D^2f}{Dx^2}$	$\tDdiff[2]{f}{x}$	$\frac{D^2f}{Dx^2}$

#### **Vectors and Matrices**

Vectors and matrices are usually written as **bold** symbols. You can either use the explicit command \vec or the short and handy form \v+<letter> to typeset vectors. The placeholder <letter> can be replaced by any lower or upper case latin or greek letter. Example:

Command	Output	Command	Output
\vec{a}	а	\va	а
\vec{A}	$\boldsymbol{A}$	\vA	$\boldsymbol{A}$
\vec{\gamma}	γ	\vgamma	γ
\vec{\Gamma}	Γ	\vGamma	Γ

Moreover there exist abbreviations for the most common matrix notations:

Command Output		Command Output		Command	Output	
\mat{1&2\\3&4}	1 2 3 4	\pmat{1&2\\3&4}	$\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$	\bmat{1&2\\3&4}	$\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$	
\Bmat{1&2\\3&4}	$   \begin{bmatrix}     1 & 2 \\     3 & 4   \end{bmatrix} $	\vmat{1&2\\3&4}	$\begin{vmatrix} 1 & 2 \\ 3 & 4 \end{vmatrix}$	\Vmat{1&2\\3&4}	1 2 3 4	

#### **Indices**

There exists the auxillary command \rs to typeset leftsided indices in equations. Example: type \rs{\_a^b}{\vC}\_c^d to obtain  ${}_a^b X_c^d$ .

# 2.9 IWBlayout

Dependencies	IWBcore IWBcolor IWBtikz IWBlogo
Options	optAfive optAfour optAthree optAtwo optAone optAzero optBeamerClas-
	sicFormat optBeamerWideFormat optExzellenz
Loaded Packages	geometry
Sourcefile	source/MW/IWB/Modules/IWBlayout.sty
Sourcefile (parent)	source/TUM/Modules/TUMlayout.sty
Commands	\IWBlayoutHeaderCustomChair \IWBlayoutTitlePageDefault \IWBlayoutSetIndent \IWBlayoutNoIndent \IWBlayoutSetAfive \IWBlayoutSetAfour \IWBlayoutSetAthree \IWBlayoutSetAtwo \IWBlayoutSetAtwo \IWBlayoutSetAtwo \IWBlayoutSetAthree \IWBlayoutSetBeamerWideFormat \IWBlayoutPutAtCenter \IWBlayoutPutAtNorthWest \IWBlayoutPutAtNorthWestCentered \IWBlayoutPutAtNorthEast \IWBlayoutPutAtSouthWest \IWBlayoutPutAtSouthWest \IWBlayoutPutAtSouthWest \IWBlayoutPutAtSouthEastCentered \IWBlayoutHeaderCDTUMLogoOnly \IWBlayoutHeaderCDTUM \IWBlayoutHeaderCDDepartment \IWBlayoutCDBorder

# **Description**

The IWBlayout module defines page size and margins, commands for absolute positioning of content on the page and header definitions. The four options of this module specify the document page format. If no size option is specified the default option optAfour is used.

The following table gives an overview of the page formats.

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Option	Size	Margins
optAfive	DIN A5 (148mm × 210mm)	1.41cm
optAfour	DIN A4 (210mm × 297mm)	2cm
optAthree	DIN A3 (297mm × 420mm)	2.82cm
optAtwo	DIN A2 (420mm × 594mm)	4cm
optAone	DIN A1 (594mm × 841mm)	5.66cm
optAzero	DIN A0 (841mm × 1189mm)	8cm
optBeamerClassicFormat	4:3 (254mm × 190.5mm)	1cm (left and right)
optBeamerWideFormat	16:9 (254mm × 142.9mm)	1cm (left and right)

# **Absolute Positioning**

For absolute positioning on the page several convenience commands exits. They all start with \IWBlayoutPutAt and allow positioning relative to global page markers, i. e. the corners or the page center. The content is integrated into a TikZ-picture whose anchor is in the same corner as the specified page corner. Moreover the content may be rotated by any angle of rotation.

**Important:** Note that due to positioning issues TikZ-pictures cannot be externalized in combination with this commands.

#### **Headers**

The module defines several headers which differ in the amount of information displayed. Headers including the letters "CD" correspond to the corporate design of the TUM. By passing the option <code>optExzellenz</code> you can enable the display of the anniversary badge (use this only in the anniversary year 2018).

#### 2.10 IWBbiblio

Dependencies	IWBcore IWBlang
Options	optBiber optBibtex optBibstyleNumeric optBibstyleAlphabetic optBib-
	styleAuthorYear
Loaded Packages	biblatex
Sourcefile	source/MW/IWB/Modules/IWBbiblio.sty
Sourcefile (parent)	source/TUM/Modules/TUMbiblio.sty
Commands	none

#### **Description**

The IWBbiblio module generates the layout of the citations and bibliography. You can choose between the two backends *biber* (optBiber, modern, recommended) and *bibtex* (optBibtex, outdated, not recommended). Note, that the module is only loaded, if a backend has been specified.

Moreover the style of bibliography entries can be specified. An example for the references

- Albert Einstein, "Zur Elektrodynamik bewegter Körper", 1905
- Michel Goossens, Frank Mittelbach, and Alexander Samarin "The LaTeX Companion", 1993

# is given for every option:

- optBibstyleAuthorYear: Einstein 1916 Goossens, Mittelbach and Samarin 1993
- optBibstyleAlphabetic: [Ein16] [GMS93]
- optBibstyleNumeric: [1] [2]

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# 2.11 IWBnames

Dependencies	IWBcore
Options	none
Loaded Packages	none
Sourcefile	source/MW/IWB/Modules/IWBnames.sty
Sourcefile (parent)	source/TUM/Modules/TUMnames.sty
Commands	IWBnamesProfHerrmann   IWBnamesProfHofmann   IWBnamesPresident   IWBnamesProfAdams   IWBnamesProfBengler   IWBnamesProfBerensmeier   IWBnamesProfBottasso   IWBnamesProfCaccamo   IWBnamesProfDaub   IWBnamesProfDrechsler   IWBnamesProfFottner   IWBnamesProfGee   IWBnamesProfGrosse   IWBnamesProfGuemmer   IWBnamesProfGuenthner   IWBnamesProfHaidh   IWBnamesProfHajek   IWBnamesProfHolzapfel   IWBnamesProfHornung   IWBnamesProfKaltenbach   IWBnamesProfKlein   IWBnamesProfKoutsourelakis   IWBnamesProfKremling   IWBnamesProfLieleg   IWBnamesProfLienkamp   IWBnamesProfLindemann   IWBnamesProfLohmann   IWBnamesProfLueth   IWBnamesProfMacianJuan   IWBnamesProfMarburg   IWBnamesProfNeu   IWBnamesProfPolifke   IWBnamesProfPolifke   IWBnamesProfPolifke   IWBnamesProfSenner   IWBnamesProfSpannerUlmer   IWBnamesProfSpliethoff   IWBnamesProfStahl   IWBnamesProfVogelHeuser   IWBnamesProfVolk   IWBnamesProfWachtmeister   IWBnamesProfWall   IWBnamesProfWalter   IWBnamesProfWerner   IWBnamesProfWeusterBotz   IWBnamesProfZaeh   IWBnamesProfZimmermann   IWBnamesProfAlthoff   IWBnamesProfBurschka   IWBnamesProfKnoll   IWBnamesProfPretschner   IWBnamesProfAlthoff   IWBnamesProfBurschka   IWBnamesProfPretschner   IWBnamesProfAlthoff   IWBnamesProfBurschka   IWBnamesProfPretschner   IWBnamesProfBurschka   IWBnamesProfPretschner   IWBnamesProfBurschka   IWBnamesProfPretschner   IWBnamesProfBurschka   IWBnamesProfPretschner   IWBnamesProfBurschka   IWBnamesProfPretschner   IWBnamesProfBurschka   IWBnamesPro

# **Description**

The IWBnames module implements the names of various active professors (see chapter 5).

# 2.12 IWButils

Dependencies	IWBcore IWBlang IWBcolor	
Options	optHideTodos optHideAnnotations	
Loaded Packages	excludeonly epstopdf xspace cancel datetime eurosym blindtext titlesec	
	titletoc pdfcomment	
Sourcefile	source/MW/IWB/Modules/IWButils.sty	
Sourcefile (parent)	source/TUM/Modules/TUMutils.sty	
Commands	\IWButilsTodo \IWButilsTodoW \IWButilsTodoSpacer \IWButilsPDFanno \IWButilsPDFannoColor \IWButilsPDFhigh \IWButilsDate \IWButilsToday	

# **Description**

The IWButils module provides several utility functions, which make it easier to integrate comments, annotations and other notes into the final PDF.

#### **Todos**

There are several ways to typeset todos:

Command	Output	Comment
∖IWButilsTodo	ToDo: default, ToDo: custom	simple todo note (color customizable)
\IWButilsTodoW	ToDo: default, ToDo: custom	todo note with LaTeX warning

There is also the possibility to insert a placeholder by \IWButilsTodoSpacer:

ToDo: custom spacer header

Note: Todos can be hidden globally by passing the option optHideTodos.

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#### **Comments and annotations**

If the document length should not be influenced by a comment, one may use the following commands:

Command	Output	Comment
\IWButilsPDFanno	annotated text	simple pdf popup annotation
\IWButilsPDFannoColor	annotated text	pdf popup annotation (custom color)
\IWButilsPDFhigh	highlighted text passage	pdf highlighted text (customizable color)

**Note:** Comments and annotations can be hidden globally by passing the option optHideAnnotations.

#### **Dates**

In order to typeset dates, the two commands \IWButilsDate and \IWButilsToday exist.

Command	Output	Comment
\IWButilsDate	January 1, 1970	displays a custom date
\IWButilsToday	September 26, 2023	displays the current date (compile time)

#### **2.13 IWBref**

Dependencies	IWBcore IWBlang IWBcolor
Options	optBlackRefs
Loaded Packages	hyperref cleveref
Sourcefile	source/MW/IWB/Modules/IWBref.sty
Sourcefile (parent)	source/TUM/Modules/TUMref.sty
Commands	\IWBrefSetPDFMetadata

#### **Description**

The IWBref module takes care of in-document referencing. Basically it loads and initializes the hyperref and cleveref packages. Furthermore the module provides a command to set the PDF meta-data (properties of the pdf document).

You can use the <code>optBlackRefs</code> to disable colored references. Hint: This module loads the hyperref packages which often has to be loaded after loading certain other packages. In order to load packages before hyperref and without modifying the TUMlatex class/package you can add a file <code>pre\_hyperref\_packages.tex</code> right beside your <code>main.tex</code> file. The TUMlatex package will automatically execute the content of this file (i.e. your additional package loading macros) directly before loading the hyperref package.

# **Chapter 3**

# **Styles**

# 3.1 IWBstudentthesis

Baseclass	[11pt,a4paper,twoside,fleqn]book
Options	none
Loaded Packages	caption fancyhdr glossaries ifthen
Sourcefile	source/MW/IWB/Styles/IWBstudentthesis.sty
Sourcefile (parent)	source/TUM/Styles/TUMstudentthesis.sty
Commands	\ \text{\WBstudentthesisTitlePageCustom} \ \text{\WBstudentthesisTitlePageCustomBachelorsThesis} \ \text{\WBstudentthesisTitlePageCustomMastersThesis} \ \text{\WBstudentthesisTitlePageCustomMastersThesis} \ \text{\WBstudentthesisAbstract} \ \text{\WBstudentthesisPrintTableOfContents} \ \text{\WBstudentthesisTitlePageCD} \ \text{\WBstudentthesisTitlePageFrontPage} \ \text{\WBstudentthesisTitlePageFrontPageInfoTable} \ \text{\WBstudentthesisTitlePageCDBachelorsThesis}} \ \text{\WBstudentthesisTitlePageCDSemesterThesis}} \ \text{\WBstudentthesisTitlePageCDMasterThesis}} \ \text{\WBstudentthesisTitlePageCDIDP} \ \WBstudentthesisTitlePag

# **Description**

The IWBstudentthesis style was created to support students by providing unified thesis templates.

# 3.2 IWBstudentexpose

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	caption fancyhdr
Sourcefile	source/MW/IWB/Styles/IWBstudentexpose.sty
Sourcefile (parent)	source/TUM/Styles/TUMstudentexpose.sty
Commands	\IWBstudentexposeTitlePage \IWBstudentexposeHeader \IWBstudentexposeTitlePageBachelors-Thesis \IWBstudentexposeTitlePageSemesterThesis \IWBstudentexposeTitlePageIDP \IWBstudentexposeReview

# **Description**

The style IWBstudentexpose helps students to set up their expose for their student thesis. The style is approved by the Center of Key Competencies of the TUM Department of Mechanical Engineering.

# 3.3 IWBposter

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	none
Sourcefile	source/MW/IWB/Styles/IWBposter.sty
Sourcefile (parent)	source/TUM/Styles/TUMposter.sty
Commands	\IWBposterDrawGrid

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# **Description**

The IWBposter style is used to create individual posters of size DIN A0. In order to comply with the poster size, the font size, logos etc. are scaled.

# 3.4 IWBempty

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	none
Sourcefile	source/MW/IWB/Styles/IWBempty.sty
Sourcefile (parent)	source/TUM/Styles/TUMempty.sty
Commands	none

#### **Description**

The IWBempty style is probably the most difficult one to use, since it is a completely empty style. That means the complete formatting process is up to the user. An unexperienced user may therefore choose another style to start with.

# 3.5 IWBphdprepublication

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	caption fancyhdr
Sourcefile	source/MW/IWB/Styles/IWBphdprepublication.sty
Sourcefile (parent)	source/TUM/Styles/TUMphdprepublication.sty
Commands	\IWBphdprepublicationTitlePage

# **Description**

The style IWBphdprepublication helps PhD students to set up their pre-publication list for the TUM Graduate School (at the end of the doctoral project). The corresponding template IWBphdprepublication is approved by the Graduate School.

#### 3.6 IWBletter

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	lastpage
Sourcefile	source/MW/IWB/Styles/IWBletter.sty
Sourcefile (parent)	source/TUM/Styles/TUMletter.sty
Commands	\IWBletterSetReceiver \IWBletterSetPlace \IWBletterSetDate \IWBletterSetSubject \IWBletterSetTitle \IWBletterSetName \IWBletterSetPhone \IWBletterSetFax \IWBletterSetEMail \IWBletterSetHome-page \IWBletterHeader

# **Description**

The IWBletter style typesets a default letter according to the TUM Corporate Design.

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#### 3.7 IWBbeamer

Baseclass	[noamssymb,t,11pt]beamer
Options	none
Loaded Packages	caption transparent
Sourcefile	source/MW/IWB/Styles/IWBbeamer.sty
Sourcefile (parent)	source/TUM/Styles/TUMbeamer.sty
Commands	\IWBbeamerSetupHeader \IWBbeamerSetFooterText \IWBbeamerSetupFooterCD \IWBbeamerSetupFooterCD \IWBbeamerSetupFooterSlideNumberOnly \IWBbeamerTitlePageDefault

# **Description**

The IWBbeamer style creates a default style for presentations. It can be used for lectures, conference presentations or student thesis presentations. The style complies in general with the TUM corporate design, such that it can also be used for external presentations (e.g. conferences).

To customize the colors, fonts, font sizes or even complete templates one can use the standard beamer macros

- \setbeamercolor{template name}{<key=value> list},
- \setbeamerfont{template name}{<key=value> list},
- \setbeamersize{size name=<dim>},
- \setbeamertemplate{template name}{your definition}.

There is a useful cheat-sheet on how to modify the style of your beamer presentation available online:

http://www.cpt.univ-mrs.fr/~masson/latex/Beamer-appearance-cheat-sheet.pdf

# 3.8 IWBdocumentation

Baseclass	[11pt,a4paper,oneside,fleqn]book
Options	none
Loaded Packages	caption longtable fancyhdr
Sourcefile	source/MW/IWB/Styles/IWBdocumentation.sty
Sourcefile (parent)	source/TUM/Styles/TUMdocumentation.sty
Commands	\IWBdocumentationModule \IWBdocumentationStyle \IWBdocumentationTemplate \IWBdocumentationOption \IWBdocumentationCode

# **Description**

The IWBdocumentation style is used to specify the layout of **this** document. There are several commands to typeset special names:

Command	Output	Description
\IWBdocumentationModule	module	typesets module names
\IWBdocumentationStyle	style	typesets style names
\IWBdocumentationTemplate	template	typesets template names
\IWBdocumentationOption	option	typesets options
\IWBdocumentationCode	code	typesets LaTeX code

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# 3.9 IWBdocument

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	caption
Sourcefile	source/MW/IWB/Styles/IWBdocument.sty
Sourcefile (parent)	source/TUM/Styles/TUMdocument.sty
Commands	none

# **Description**

The IWBdocument style defines a very basic layout. It can be used for most documents which do not fit other styles.

# 3.10 IWBphdthesis

Baseclass	[11pt,a4paper,twoside]book
Options	none
Loaded Packages	none
Sourcefile	source/MW/IWB/Styles/IWBphdthesis.sty
Sourcefile (parent)	source/TUM/Styles/TUMphdthesis.sty
Commands	\IWBphdthesisTitlePage

# **Description**

The IWBphdthesis style helps research assistants to write their PhD thesis document.

# 3.11 IWBphdexpose

Baseclass	[11pt,a4paper,fleqn]article
Options	none
Loaded Packages	caption fancyhdr
Sourcefile	source/MW/IWB/Styles/IWBphdexpose.sty
Sourcefile (parent)	source/TUM/Styles/TUMphdexpose.sty
Commands	\IWBphdexposeTitlePage

# **Description**

The style IWBphdexpose helps PhD students to set up their expose for the TUM Graduate School. The corresponding template IWBphdexpose is approved by the Graduate School.

# **Chapter 4**

# **Tipps and Tricks**

# 4.1 Using the Auto-Completion Feature of TeXstudio

If you are using TeXstudio<sup>1</sup> for editing LaTeX documents you may use the auto-completion feature together with this package. For details on how to set up this feature be referred to the GitLab project page<sup>2</sup>.

# 4.2 LaTeX Coding Style

Although everybody has a different style of coding, one should consider following style suggestions in order to keep the code clear and readable.

- Add a % (percent sign) at the end of each line. This tells the compiler, that the line ends here and can save compilation time. Also place a percent sign in empty lines to avoid irregular spacing in the compiled document.
- Do not name sub-folders "aux", since Windows seems to have a problem with that name (especially if you share your document via git).
- Use comments to structure your code.
- Replace tabs by whitespaces in order to guarantee a uniform display on every system.

**Important:** Note that some "bad" code fragments (like empty lines) not only influence the readability of the code but also may change the output and can lead to irregular spacing.

<sup>&</sup>lt;sup>1</sup>https://www.texstudio.org/

<sup>&</sup>lt;sup>2</sup>https://gitlab.lrz.de/AM/TUMlatex

# **Chapter 5**

# **Command Reference**

#### \IWBcoreLogInfo{InfoMessage}

Description: Writes an information into the log-file.

Module: IWBcore - File: source/TUM/Modules/TUMcore.sty (Line: 27)

# \IWBcoreLogWarning{WarningMessage}

Description: Writes a warning into the log-file.

Module: IWBcore - File: source/TUM/Modules/TUMcore.sty (Line: 31)

#### \IWBcoreLogError{ErrorMessage}

Description: Writes an error into the log-file.

Module: IWBcore - File: source/TUM/Modules/TUMcore.sty (Line: 35)

#### \IWBcoreRepetition{Count}{CodeToRepeat}

Description: Executes the given code several times.

Module: IWBcore - File: source/TUM/Modules/TUMcore.sty (Line: 42)

#### \IWBcoreProjectWebsite

Description: Prints the project-website of TUMlatex.

Module: IWBcore - File: source/TUM/Modules/TUMcore.sty (Line: 55)

#### \IWBfontSetDocumentFontSizeVI

Description: Sets the default font size of the document to 6.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 87)

#### \IWBfontSetDocumentFontSizeVII

Description: Sets the default font size of the document to 7.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 216)

#### \IWBfontSetDocumentFontSizeVIII

Description: Sets the default font size of the document to 8.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 345)

#### \IWBfontSetDocumentFontSizeIX

Description: Sets the default font size of the document to 9.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 474)

#### \IWBfontSetDocumentFontSizeX

Description: Sets the default font size of the document to 10.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 603)

# \IWBfontSetDocumentFontSizeXI

Description: Sets the default font size of the document to 11.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 732)

#### \IWBfontSetDocumentFontSizeXII

Description: Sets the default font size of the document to 12. Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 859)

#### \IWBfontSetDocumentFontSizeXIII

Description: Sets the default font size of the document to 13.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 987)

#### \IWBfontSetDocumentFontSizeXIV

Description: Sets the default font size of the document to 14.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1116)

#### \IWBfontSetDocumentFontSizeXV

Description: Sets the default font size of the document to 15.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1245)

#### \IWBfontSetDocumentFontSizeXVI

Description: Sets the default font size of the document to 16.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1374)

#### \IWBfontSetDocumentFontSizeXVIII

Description: Sets the default font size of the document to 18.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1503)

#### \IWBfontSetDocumentFontSizeXX

Description: Sets the default font size of the document to 20.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1632)

#### \IWBfontSetDocumentFontSizeXXII

Description: Sets the default font size of the document to 22.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1761)

#### \IWBfontSetDocumentFontSizeXXIV

Description: Sets the default font size of the document to 24.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 1890)

#### \IWBfontSetDocumentFontSizeXXVIII

Description: Sets the default font size of the document to 28.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 2019)

#### \IWBfontSetDocumentFontSizeXXLII

Description: Sets the default font size of the document to 32.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 2148)

#### \IWBfontSetDocumentFontSizeXXLVI

Description: Sets the default font size of the document to 36.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 2277)

#### \IWBfontSetDocumentFontSizeXL

Description: Sets the default font size of the document to 40.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 2406)

#### \IWBfontSetDocumentFontSizeXLIV

Description: Sets the default font size of the document to 44.

Module: IWBfont - File: source/TUM/Modules/TUMfont.sty (Line: 2535)

#### \IWBlangBibliography

Description: Prints the german or english version of the name for Bibligraphy.

Module: IWBlang - File: source/MW/IWB/Modules/IWBlang.sty (Line: 8)

#### \IWBlangAcronyms

Description: Prints the german or english version of the name for List of Abbreviations.

Module: IWBlang - File: source/MW/IWB/Modules/IWBlang.sty (Line: 10)

#### \IWBlangGlossary

Description: Prints the german or english version of the name for Glossary.

Module: IWBlang - File: source/MW/IWB/Modules/IWBlang.sty (Line: 12)

#### \IWBlangSwitchToGerman

Description: Changes the current language to German.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 33)

#### \IWBlangSwitchToEnglish

Description: Changes the current language to English.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 39)

#### \IWBlangGerEng{GermanCode}{EnglishCode}

Description: Depending on the chosen document language, the given german or english related code will be executed.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 48)

#### \IWBlangForceGerman{Text}

Description: Forces german version of specified code.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 50)

#### \IWBlangForceEnglish{Text}

Description: Forces english version of specified code.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 61)

#### \IWBlangTUM

Description: Prints the official (german or english) long-name of the TUM.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 79)

#### \IWBlangDepartmentMW

Description: Prints the official (german or english) name of the TUM School of Engineering and Design. As of 10/2021, the Department of Mechanical Engineering is part of the TUM School of Engineering and Design. Instead of the name of the faculty, the name of the School should be used.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 84)

#### \IWBlangDepartmentIN

Description: Prints the official (german or english) name of the Department of Informatics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 86)

#### \IWBlangDepartmentCIT

Description: Prints the official (german or english) name of the School of Computation, Information and Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 88)

# \IWBlangDepartment

Description: Prints the official (german or english) name of the department.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 93)

# \IWBlangChairMWAER

Description: Prints the official (german or english) name of the Chair of Aerodynamics and Fluid Mechanics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 99)

#### \IWBlangChairMWVIB

Description: Prints the official (german or english) name of the Chair of Vibroacoustics of Vehicles and Machines.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 101)

#### \IWBlangChairMWAM

Description: Prints the official (german or english) name of the Chair of Applied Mechanics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 103)

#### \IWBlangChairMWAPT

Description: Prints the official (german or english) name of the Chair of Plant and Process Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 105)

#### \IWBlangChairMWAIS

Description: Prints the official (german or english) name of the Chair of Automation and Information Systems.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 107)

#### \IWBlangChairMWIWB

Description: Prints the official (german or english) name of the Institute for Machine Tools and Industrial Management (iwb).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 109)

#### \IWBlangChairMWIWBLWF

Description: Prints the official (german or english) name of the Chair of Machine Tools and Manufacturing Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 111)

#### \IWBlangChairMWIWBLBM

Description: Prints the official (german or english) name of the Chair of Industrial Management and Assembly Technologies.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 113)

#### \IWBlangChairMWIWBPE

Description: Prints the official (german or english) name of the Chair for Production Technology and Energy Storage Systems.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 115)

#### \IWBlangChairMWBVT

Description: Prints the official (german or english) name of the Chair of Biochemical Engineering.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 117)

#### \IWBlangChairMWLCC

Description: Prints the official (german or english) name of the Chair of Carbon Composites.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 119)

#### \IWBlangChairMWLES

Description: Prints the official (german or english) name of the Chair of Energy Systems.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 121)

#### \IWBlangChairMWLFE

Description: Prints the official (german or english) name of the Chair of Ergonomics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 123)

#### \IWBlangChairMWFTM

Description: Prints the official (german or english) name of the Chair of Automotive Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 125)

# \IWBlangChairMWFSD

Description: Prints the official (german or english) name of the Chair of Flight System Dynamics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 127)

# \IWBlangChairMWFML

Description: Prints the official (german or english) name of the Chair of Materials Handling, Material Flow, Logistics / Logistics Engineering.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 129)

#### \IWBlangChairMWLHT

Description: Prints the official (german or english) name of the Chair of Helicopter Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 131)

#### \IWBlangChairMWPKM

Description: Prints the official (german or english) name of the Associate Professorship of Continuum Mechanics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 133)

#### \IWBlangChairMWLLB

Description: Prints the official (german or english) name of the Chair of Lightweight Structures.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 135)

#### \IWBlangChairMWLLS

Description: Prints the official (german or english) name of the Chair of Aircraft Design.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 137)

#### \IWBlangChairMWFZG

Description: Prints the official (german or english) name of the Chair of Machine Elements.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 139)

#### \IWBlangChairMWMHPC

Description: Prints the official (german or english) name of the Associate Professorship of Mechanics and High

Performance Computing.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 141)

#### \IWBlangChairMWLMT

Description: Prints the official (german or english) name of the Chair of Medical Engineering.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 143)

#### \IWBlangChairMWLMM

Description: Prints the official (german or english) name of the Chair of Micro Technology and Medical Device Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 145)

#### \IWBlangChairMWLNT

Description: Prints the official (german or english) name of the Chair of Nuclear Technology.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 147)

#### \IWBlangChairMWLNM

Description: Prints the official (german or english) name of the Chair of Computational Mechanics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 149)

#### \IWBlangChairMWPMW

Description: Prints the official (german or english) name of the Associate Professorship of Plasma Material Interaction.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 151)

#### \IWBlangChairMWPE

Description: Prints the official (german or english) name of the Chair of Product Development.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 153)

#### \IWBlangChairMWPTM

Description: Prints the official (german or english) name of the Chair of Production and Technology in Media.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 155)

#### \IWBlangChairMWLFA

Description: Prints the official (german or english) name of the Chair of Space Propulsion.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 157)

#### \IWBlangChairMWLRT

Description: Prints the official (german or english) name of the Chair of Astronautics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 159)

#### \IWBlangChairMWRT

Description: Prints the official (german or english) name of the Chair of Automatic Control.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 161)

#### \IWBlangChairMWSES

Description: Prints the official (german or english) name of the Assistant Professorship of Safe Embedded Systems.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 163)

#### \IWBlangChairMWSPGM

Description: Prints the official (german or english) name of the Associate Professorship of Sport Equipment and Materials.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 165)

#### \IWBlangChairMWTD

Description: Prints the official (german or english) name of the Chair of Thermodynamics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 167)

#### \IWBlangChairMWTFD

Description: Prints the official (german or english) name of the Associate Professorship of Thermo-Fluid Dynamics.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 169)

#### \IWBlangChairMWUTG

Description: Prints the official (german or english) name of the Chair of Metal Forming and Casting.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 171)

#### \IWBlangChairMWLVK

Description: Prints the official (german or english) name of the Chair of Internal Combustion Engines.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 173)

#### \IWBlangChairMWWKM

Description: Prints the official (german or english) name of the Chair of Materials Science and Mechanics of Materials.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 175)

#### \IWBlangChairMWLWE

Description: Prints the official (german or english) name of the Chair of Wind Energy.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 177)

#### \IWBlangChairMWZFP

Description: Prints the official (german or english) name of the Chair of Non-Destructive Testing.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 179)

#### \IWBlangChairMWZL

Description: Prints the official (german or english) name of the Central Teaching Unit.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 181)

#### \IWBlangChairCITAIR

Description: Prints the official (german or english) name of the Chair of Robotics, Artificial Intelligence and Real-time Systems.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 185)

#### \IWBlangChairINAIR

Description: Prints the official (german or english) name of the Chair of Robotics, Artificial Intelligence and Real-time Systems.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 189)

#### \IWBlangChairINSSE

Description: Prints the official (german or english) name of the Chair of Software and Systems Engineering.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 191)

#### \IWBlangChair

Description: Prints the official (german or english) name of the *own* chair.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 196)

#### \IWBlangresearchassistantMale

Description: Prints the (german or english) name of a research assistant (male, first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 201)

#### \IWBlangResearchassistantMale

Description: Prints the (german or english) name of a research assistant (male, first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 203)

#### \IWBlangResearchAssistantMale

Description: Prints the (german or english) name of a research assistant (male, all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 205)

#### \IWBlangresearchassistantFemale

Description: Prints the (german or english) name of a research assistant (female, first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 207)

#### \IWBlangResearchassistantFemale

Description: Prints the (german or english) name of a research assistant (female, first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 209)

#### \IWBlangResearchAssistantFemale

Description: Prints the (german or english) name of a research assistant (female, all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 211)

#### \IWBlangtenuredprofessorMale

Description: Prints the (german or english) name of a tenured professor (male, first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 213)

#### \IWBlangTenuredprofessorMale

Description: Prints the (german or english) name of a tenured professor (male, first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 215)

#### \IWBlangTenuredProfessorMale

Description: Prints the (german or english) name of a tenured professor (male, all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 217)

#### \IWBlangtenuredprofessorFemale

Description: Prints the (german or english) name of a tenured professor (female, first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 219)

#### \IWBlangTenuredprofessorFemale

Description: Prints the (german or english) name of a tenured professor (female, first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 221)

#### \IWBlangTenuredProfessorFemale

Description: Prints the (german or english) name of a tenured professor (female, all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 223)

#### \IWBlangsupervisor

Description: Prints the (german or english) name of a supervisor (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 225)

#### \IWBlangSupervisor

Description: Prints the (german or english) name of a supervisor (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 227)

#### \IWBlangsupervision

Description: Prints the (german or english) name of a supervision (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 229)

#### \IWBlangSupervision

Description: Prints the (german or english) name of a supervision (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 231)

#### \IWBlangexaminer

Description: Prints the (german or english) name of an examiner (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 233)

#### \IWBlangExaminer

Description: Prints the (german or english) name of an examiner (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 235)

#### \IWBlangbachelorsthesis

Description: Prints the (german or english) name of a bachelor's thesis (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 240)

#### \IWBlangBachelorsthesis

Description: Prints the (german or english) name of a bachelor's thesis (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 242)

#### \IWBlangBachelorsThesis

Description: Prints the (german or english) name of a bachelor's thesis (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 244)

#### \IWBlangdiplomathesis

Description: Prints the (german or english) name of a diploma thesis (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 246)

#### \IWBlangDiplomathesis

Description: Prints the (german or english) name of a diploma thesis (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 248)

#### \IWBlangDiplomaThesis

Description: Prints the (german or english) name of a diploma thesis (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 250)

#### \IWBlangsemesterthesis

Description: Prints the (german or english) name of a semester thesis (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 252)

#### \IWBlangSemesterthesis

Description: Prints the (german or english) name of a semester thesis (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 254)

#### \IWBlangSemesterThesis

Description: Prints the (german or english) name of a semester thesis (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 256)

#### \IWBlangmastersthesis

Description: Prints the (german or english) name of a master's thesis (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 258)

#### \IWBlangMastersthesis

Description: Prints the (german or english) name of a master's thesis (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 260)

#### \IWBlangMastersThesis

Description: Prints the (german or english) name of a master's thesis (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 262)

#### \IWBlanginterdisciplinaryproject

Description: Prints the (german or english) name of an IDP (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 264)

#### \IWBlangInterdisciplinaryproject

Description: Prints the (german or english) name of an IDP (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 266)

#### \IWBlangInterdisciplinaryProject

Description: Prints the (german or english) name of an IDP (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 268)

#### \IWBlangScientificWorkForObtainingAcademicDegree

Description: Prints the (german or english) sentence for obtaining the degree.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 270)

#### \IWBlangFieldOfStudyinformatics

Description: Prints the (german or english) name of a field of study (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 275)

#### \IWBlangFieldOfStudyInformatics

Description: Prints the (german or english) name of a field of study (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 277)

#### \IWBlangFieldOfStudygamesengineering

Description: Prints the (german or english) name of a field of study (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 279)

#### \IWBlangFieldOfStudyGamesengineering

Description: Prints the (german or english) name of a field of study (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 281)

#### \IWBlangFieldOfStudyGamesEngineering

Description: Prints the (german or english) name of a field of study (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 283)

#### \IWBlangFieldOfStudyinformationsystems

Description: Prints the (german or english) name of a field of study (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 285)

#### \IWBlangFieldOfStudyInformationsystems

Description: Prints the (german or english) name of a field of study (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 287)

#### \IWBlangFieldOfStudyInformationSystems

Description: Prints the (german or english) name of a field of study (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 289)

#### \IWBlangFieldOfStudybiomedicalcomputing

Description: Prints the (german or english) name of a field of study (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 291)

#### \IWBlangFieldOfStudyBiomedicalcomputing

Description: Prints the (german or english) name of a field of study (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 293)

#### \IWBlangFieldOfStudyBiomedicalComputing

Description: Prints the (german or english) name of a field of study (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 295)

#### \IWBlangFieldOfStudyautomotivesoftwareengineering

Description: Prints the (german or english) name of a field of study (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 297)

#### \IWBlangFieldOfStudyAutomotivesoftwareengineering

Description: Prints the (german or english) name of a field of study (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 299)

#### \IWBlangFieldOfStudyAutomotiveSoftwareEngineering

Description: Prints the (german or english) name of a field of study (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 301)

#### \IWBlangFieldOfstudyroboticscognitionintelligence

Description: Prints the (german or english) name of a field of study (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 303)

#### \IWBlangFieldOfStudyRoboticscognitionintelligence

Description: Prints the (german or english) name of a field of study (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 305)

#### \IWBlangFieldOfStudyRoboticsCognitionIntelligence

Description: Prints the (german or english) name of a field of study (all first letters in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 307)

#### \IWBlangPhdDegreeDrIng

Description: Prints the german name of a doctoral degree.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 312)

#### \IWBlangPhdDegreeDrIngFemale

Description: Prints the german name of a doctoral degree for a female.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 314)

#### \IWBlangPhdDegreeDrIngOld

Description: Prints the german name of a doctoral degree Dr.-Ing. from the Promotionsordnung of 2012.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 316)

#### \IWBlangPhdDegreeDrRerNat

Description: Prints the german name of a doctoral degree.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 318)

#### \IWBlangPhdDegreeDrRerNatFemale

Description: Prints the german name of a doctoral degree for a female.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 320)

#### \IWBlangDate

Description: Prints the german or english version of the word *date*.

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 325)

#### \IWBlangMonth{NumberOfMonth}

Description: Prints the name of the given month in german or english (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 328)

#### \IWBlangMonthShort{NumberOfMonth}

Description: Prints the short-name of the given month in german or english (first letter in upper case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 333)

#### \IWBlangmonth{NumberOfMonth}

Description: Prints the name of the given month in german or english (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 338)

#### \IWBlangmonthShort{NumberOfMonth}

Description: Prints the short-name of the given month in german or english (first letter in lower case).

Module: IWBlang - File: source/TUM/Modules/TUMlang.sty (Line: 343)

#### \IWBaddressCityMunich

Description: Prints the name of the city Munich.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 8)

#### \IWBaddressCityGarching

Description: Prints the name of the city Garching.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 10)

#### \IWBaddressCityMW

Description: Prints the city of the Department of Mechanical Engineering.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 12)

#### \IWBaddressCityIN

Description: Prints the city of the Department of Informatics.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 14)

#### \IWBaddressCityCIT

Description: Prints the city of the School of Computation, Information and Technology.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 16)

#### \IWBaddressCityDepartment

Description: Prints the city of the Department.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 18)

#### \IWBaddressCityChair

Description: Prints the city of the chair's address.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 20)

#### \IWBaddressPostalCodeGarching

Description: Prints the postal code of the city Garching.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 24)

#### \IWBaddressPostalCodeMunich

Description: Prints the postal code of the city Munich.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 26)

#### \IWBaddressPostalCodeMW

Description: Prints the postal code of the Department of Mechanical Engineering.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 28)

#### \IWBaddressPostalCodelN

Description: Prints the postal code of the Department of Informatics.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 30)

#### \IWBaddressPostalCodeCIT

Description: Prints the postal code of the School of Computation, Information and Technology.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 32)

#### \IWBaddressPostalCodeDepartment

Description: Prints the postal code of the department.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 34)

#### \IWBaddressPostalCodeChair

Description: Prints the postal code of the chair's address.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 36)

#### \IWBaddressStreetMW

Description: Prints the street of the Department of Mechanical Engineering.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 40)

#### \IWBaddressStreetIN

Description: Prints the street of the Department of Informatics.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 42)

#### \IWBaddressStreetCIT

Description: Prints the street of the School of Computation, Information and Technology.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 44)

#### \IWBaddressStreetDepartment

Description: Prints the street of the department.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 46)

#### \IWBaddressStreetChair

Description: Prints the street of the chair's address.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 48)

#### \IWBaddressIBANTUM

Description: Prints the IBAN number of the Technical University of Munich's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 52)

#### \IWBaddressIBANMW

Description: Prints the IBAN number of the Department of Mechanical Engineering's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 54)

#### \IWBaddressIBANIN

Description: Prints the IBAN number of the Department of Informatics's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 56)

#### \IWBaddressIBANCIT

Description: Prints the IBAN number of the School of the Computation, Information and Technology's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 58)

#### \IWBaddressIBANDepartment

Description: Prints the IBAN number of the department's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 60)

#### \IWBaddressIBANChair

Description: Prints the IBAN number of the chair's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 62)

#### \IWBaddressBICTUM

Description: Prints the BIC number of the Technical University of Munich's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 66)

#### \IWBaddressBICMW

Description: Prints the BIC number of the Department of Mechanical Engineering's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 68)

#### \IWBaddressBICIN

Description: Prints the BIC number of the Department of Informatics's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 70)

#### \IWBaddressBICCIT

Description: Prints the BIC number of the School of Computation, Information and Technology's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 72)

#### \IWBaddressBICDepartment

Description: Prints the BIC number of the department's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 74)

#### \IWBaddressBICChair

Description: Prints the BIC number of the chair's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 76)

#### \IWBaddressCreditInstitutionTUM

Description: Prints the name of the credit institution of the Technical University of Munich's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 80)

#### \IWBaddressCreditInstitutionMW

Description: Prints the name of the credit institution of the Department of Mechanical Engineering's bank connection

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 82)

# \IWBaddressCreditInstitutionIN

Description: Prints the name of the credit institution of the Department of Informatics's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 84)

#### \IWBaddressCreditInstitutionCIT

Description: Prints the name of the credit institution of the School of Computation, Information and Technology's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 86)

#### \IWBaddressCreditInstitutionDepartment

Description: Prints the name of the credit institution of the departments's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 88)

#### \IWBaddressCreditInstitutionChair

Description: Prints the name of the credit institution of the chair's bank connection.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 90)

#### \IWBaddressWebsiteTUM

Description: Prints the website-URL of the Technical University of Munich.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 94)

#### \IWBaddressWebsiteMW

Description: Prints the website-URL of the Department of Mechanical Engineering.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 96)

#### \IWBaddressWebsiteIN

Description: Prints the website-URL of the Department of Informatics.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 98)

#### \IWBaddressWebsiteCIT

Description: Prints the website-URL of the School of Computation, Information and Technology.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 100)

#### \IWBaddressWebsiteDepartment

Description: Prints the website-URL of the department.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 102)

#### \IWBaddressWebsiteChair

Description: Prints the website-URL of the chair.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 104)

#### \IWBaddressTaxNumberTUM

Description: Prints the tax number of the Technical University of Munich.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 108)

#### \IWBaddressTaxNumberMW

Description: Prints the tax number of the Department of Mechanical Engineering.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 110)

#### \IWBaddressTaxNumberIN

Description: Prints the tax number of the Department of Informatics.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 112)

#### \IWBaddressTaxNumberCIT

Description: Prints the tax number of the School of Computation, Information and Technology.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 114)

#### \IWBaddressTaxNumberDepartment

Description: Prints the tax number of the department.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 116)

#### \IWBaddressTaxNumberChair

Description: Prints the tax number of the chair.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 118)

#### \IWBaddressSalesTaxIDTUM

Description: Prints the sales tax identification number of the Technical University of Munich.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 122)

#### \IWBaddressSalesTaxIDMW

Description: Prints the sales tax identification number of the Department of Mechanical Engineering.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 124)

#### \IWBaddressSalesTaxIDIN

Description: Prints the sales tax identification number of the Department of Informatics.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 126)

# \IWBaddressSalesTaxIDCIT

Description: Prints the sales tax identification number of the School of Computation, Information and Technology.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 128)

#### \IWBaddressSalesTaxIDDepartment

Description: Prints the sales tax identification number of the department. Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 130)

#### \IWBaddressSalesTaxIDChair

Description: Prints the sales tax identification number of the chair.

Module: IWBaddress - File: source/TUM/Modules/TUMaddress.sty (Line: 132)

#### \IWBtikzExternalizeSkipNext

Description: Skips the next picture (tikzpicture) in the external build.

Module: IWBtikz - File: source/TUM/Modules/TUMtikz.sty (Line: 38)

#### \IWBtikzGrid[LineStyle]{xStep}{yStep}{xCount}{yCount}

Description: Draws a grid.

Module: IWBtikz - File: source/TUM/Modules/TUMtikz.sty (Line: 43)

#### \IWBtikzCircled{Content}

Description: Surrounds a specified content with a circle.

Module: IWBtikz - File: source/TUM/Modules/TUMtikz.sty (Line: 58)

# \IWBlogoTercetTUM[Color]{Height}

Description: Prints the TUM tercet (TUM only).

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 9)

#### \IWBlogoTercetDepartment[Color]{Height}

Description: Prints the TUM tercet (TUM and department).

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 21)

#### \IWBlogoTercetChair[Color]{Height}

Description: Prints the TUM tercet (TUM, department and chair).

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 33)

#### \IWBlogoTUM[Width]{Height}{Color}

Description: Prints the logo of the TUM.

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 48)

#### \IWBlogoDepartmentMW[Width]{Height}{Color}

Description: Prints the logo of the department.

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 64)

#### \IWBlogoDepartmentIN[Width]{Height}{Color}

Description: Prints the logo of the department.

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 109)

#### \IWBlogoDepartmentCIT[Width]{Height}{Color}

Description: Prints the logo of the department.

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 134)

#### \IWBlogoDepartment[Width]{Height}{Color}

Description: Prints the logo of the department.

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 138)

#### \IWBlogoAnniversary[ReferenceHeight]{Color}

Description: Prints the anniversary badge.

Module: IWBlogo - File: source/TUM/Modules/TUMlogo.sty (Line: 143)

\real

Description: real part

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 40)

\imag

Description: imaginary part

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 42)

∖asin

Description: inverse sine

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 44)

\acos

Description: inverse cosine

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 46)

∖atan

Description: inverse tangens

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 48)

/co

Description: co-prefix for cotangens

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 50)

\atanll

Description: inverse tangens 2 (lower case)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 52)

∖Atanll

Description: inverse tangens 2 (upper case)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 54)

\sinabr

Description: Abbreviation of sine

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 56)

\cosabr

Description: Abbreviation of cosine

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 58)

∖sign

Description: sign function (long style)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 60)

\sgn

Description: sign function (short style)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 62)

\argmin

Description: argument of the minimum

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 65)

\argmax

Description: argument of the maximum

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 67)

\div

Description: divergence

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 69)

\grad

Description: gradient

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 72)

\curl

Description: curl

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 74)

\rot

Description: rotation

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 76)

\dif

Description: differentiation (lower case d)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 78)

\Dif

Description: differentiation (upper case d)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 80)

\order

Description: order

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 82)

 $Abs{x}$ 

Description: absolute value (big lines)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 87)

\abs{x

Description: absolute value (small lines)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 89)

 $\Norm\{x\}$ 

Description: norm (big lines)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 91)

 $\operatorname{\mathsf{Norm}}\{x\}$ 

Description: norm (small lines)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 93)

\**e** 

Description: Euler's number

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 95)

\const

Description: Constant (English)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 97)

\konst

Description: Constant (German)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 99)

\laplacian

Description: laplacian operator symbol

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 101)

\vdiv

Description: divergence written with nabla-operator

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 103)

\vgrad

Description: gradient written with nabla-operator

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 105)

\vcurl

Description: curl written with nabla-operator

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 107)

\vrot

Description: rotation written with nabla-operator

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 109)

\hex{x}

Description: Numeral system: hexadecimal

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 114)

 $\mathbf{x}$ 

Description: Numeral system: binary

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 116)

 $\langle dec\{x\} \rangle$ 

Description: Numeral system: decimal

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 118)

\bnot{x}

Description: Binary complement

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 120)

\MR

Description: Sets: real numbers

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 125)

\MN

Description: Sets: natural numbers

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 127)

 $\MZ$ 

Description: Sets: integer numbers

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 129)

\MC

Description: Sets: complex numbers

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 131)

 $\MQ$ 

Description: Sets: rational numbers

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 133)

\Mone

Description: 1-set

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 135)

\eqhat

Description: Relation: corresponds to

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 140)

\eqexcl

Description: Relation: demand

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 142)

\eqdef

Description: Relation: definition

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 144)

\defined

Description: Relation: definition (left)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 146)

\rdefined

Description: Relation: definition (right)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 148)

\vec{x

Description: Notation of vectors

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 154)

∖vnull

Description: null vector

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 181)

\vzero

Description: null vector

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 183)

\vone

Description: one-vector

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 185)

\vnabla

Description: nabla-vector

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 187)

 $\mathbf{x}$ 

Description: Matrix (without brackets)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 191)

\pmat{x}

Description: Matrix (curved brackets)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 193)

 $\mathbf{x}$ 

Description: Matrix (cornered brackets)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 195)

Description: Matrix (curled brackets)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 197)

\vmat{x}

Description: Matrix (single vertical line)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 199)

\Vmat{x}

Description: Matrix (double vertical line)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 201)

 $\d(x)$ 

Description: differential...

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 206)

 $\vdot{x}$ 

Description: vector-derivative (single)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 208)

 $\vdot{x}$ 

Description: vector-derivative (double)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 210)

\diff[order]{function}{variable}

Description: Derivative (lower case d)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 212)

\tdiff[order]{function}{variable}

Description: Derivative (lower case d, small style)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 214)

\pdiff[order]{function}{variable}
Description: partial derivative

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 216)

**\tpdiff**[order]{function}{variable}

Description: partial derivative (small style)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 218)

**\Ddiff**[order]{function}{variable}

Description: Derivative (upper case D)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 220)

\tDdiff[order]{function}{variable}

Description: Derivative (upper case D, small style)

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 222)

\rs{LeftSubscript}{MainVariable}

Description: Auxillary command to typeset leftsided subscripts in math mode.

Module: IWBmath - File: source/TUM/Modules/TUMmath.sty (Line: 243)

\IWBlayoutHeaderCustomChair[AnniversaryBadgeColor]

Description: Prints the custom chair header.

Module: IWBlayout - File: source/MW/IWB/Modules/IWBlayout.sty (Line: 13)

\IWBlayoutTitlePageDefault{FirstLine}{SecondLine}{ThirdLine}

Description: Prints the default titlepage for usual documents.

Module: IWBlayout - File: source/MW/IWB/Modules/IWBlayout.sty (Line: 28)

\IWBlayoutSetIndent

Description: Sets the default indent and paragraph separation depending on the chosen language.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 42)

\IWBlayoutNoIndent

Description: Disables indent and paragraph separation.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 55)

\IWBlayoutSetAfive

Description: Sets the document format to DIN A5.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 66)

#### \IWBlayoutSetAfour

Description: Sets the document format to DIN A4.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 79)

#### \IWBlayoutSetAthree

Description: Sets the document format to DIN A3.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 92)

## \IWBlayoutSetAtwo

Description: Sets the document format to DIN A2.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 105)

#### \IWBlayoutSetAone

Description: Sets the document format to DIN A1.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 118)

## \IWBlayoutSetAzero

Description: Sets the document format to DIN A0.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 131)

## \IWBlayoutSetBeamerClassicFormat

Description: Sets the document format to classical 4:3 presentation format.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 144)

## \IWBlayoutSetBeamerWideFormat

Description: Sets the document format to modern 16:9 presentation format.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 157)

## \IWBlayoutPutAtCenter[Rotation]{Content}

Description: Absolute positioning of content in the center of the page.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 183)

## \IWBlayoutPutAtNorthWest[Rotation]{xShift}{yShift}{Content}

Description: Absolute positioning of content relative to the upper left corner of the page.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 190)

## \IWBlayoutPutAtNorthWestCentered[Rotation] {xShift} {yShift} {Content}

Description: Absolute positioning of content relative to the upper left corner of the page (object center).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 197)

#### \IWBlayoutPutAtNorthEast[Rotation]{xShift}{yShift}{Content}

Description: Absolute positioning of content relative to the upper right corner of the page.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 204)

## \IWBlayoutPutAtNorthEastCentered[Rotation] {xShift} {yShift} {Content}

Description: Absolute positioning of content relative to the upper right corner of the page (object center).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 211)

## \IWBlayoutPutAtSouthWest[Rotation]{xShift}{yShift}{Content}

Description: Absolute positioning of content relative to the lower left corner of the page.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 218)

## \IWBlayoutPutAtSouthWestCentered[Rotation] \{xShift\}{yShift\}{Content\}

Description: Absolute positioning of content relative to the lower left corner of the page (object center).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 225)

## \IWBlayoutPutAtSouthEast[Rotation]{xShift}{yShift}{Content}

Description: Absolute positioning of content relative to the lower right corner of the page.

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 232)

## 

Description: Absolute positioning of content relative to the lower right corner of the page (object center).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 239)

## \IWBlayoutHeaderCDTUMLogoOnly[AnniversaryBadgeColor]

Description: Prints the official TUM Corporate Design header (TUM logo only).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 249)

## \IWBlayoutHeaderCDTUM[AnniversaryBadgeColor]

Description: Prints the official TUM Corporate Design header of the TUM (with tercet).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 258)

## \IWBlayoutHeaderCDDepartment[AnniversaryBadgeColor]

Description: Prints the TUM header of the department (with logo and tercet).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 269)

## \IWBlayoutHeaderCDDepartmentTUMLogoOnly[AnniversaryBadgeColor]

Description: Prints the TUM header of the department (with TUM logo and tercet, without department logo).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 282)

## \IWBlayoutHeaderCDChair[AnniversaryBadgeColor]

Description: Prints the official TUM Corporate Design header of the chair (with tercet).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 289)

#### \IWBlayoutCDBorder

Description: Draws the document border according to the TUM Corporate Design (protected area).

Module: IWBlayout - File: source/TUM/Modules/TUMlayout.sty (Line: 303)

## \IWBnamesProfHerrmann

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 9)

## \IWBnamesProfHofmann

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 11)

## \IWBnamesPresident

Description: Prints the full name of the current president of the TUM. Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 13)

## \IWBnamesProfAdams

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 19)

## \IWBnamesProfBengler

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 21)

## \IWBnamesProfBerensmeier

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 23)

## \IWBnamesProfBottasso

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 25)

#### \IWBnamesProfCaccamo

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 27)

#### \IWBnamesProfDaub

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 29)

#### \IWBnamesProfDrechsler

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 31)

## \IWBnamesProfFottner

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 33)

#### \IWBnamesProfGee

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 35)

#### \IWBnamesProfGrosse

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 37)

#### \IWBnamesProfGuemmer

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 39)

#### \IWBnamesProfGuenthner

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 41)

#### \IWBnamesProfHaidn

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 43)

#### \IWBnamesProfHajek

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 45)

## \IWBnamesProfHolzapfel

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 47)

#### \IWBnamesProfHornung

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 49)

#### \IWBnamesProfKaltenbach

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 51)

## \IWBnamesProfKlein

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 53)

## \IWBnamesProfKoutsourelakis

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 55)

## \IWBnamesProfKremling

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 57)

## \IWBnamesProfLieleg

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 59)

#### \IWBnamesProfLienkamp

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 61)

#### \IWBnamesProfLindemann

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 63)

#### \IWBnamesProfLohmann

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 65)

#### \IWBnamesProfLueth

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 67)

## \IWBnamesProfMacianJuan

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 69)

## \IWBnamesProfMarburg

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 71)

#### \IWBnamesProfNeu

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 73)

#### \IWBnamesProfPolifke

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 75)

#### \IWBnamesProfProvost

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 77)

#### \IWBnamesProfReinhart

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 79)

#### \IWBnamesProfRixen

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 81)

## \IWBnamesProfSatteImayer

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 83)

#### \IWBnamesProfSenner

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 85)

#### \IWBnamesProfSpannerUlmer

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 87)

## \IWBnamesProfSpliethoff

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 89)

#### \IWBnamesProfStahl

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 91)

#### \IWBnamesProfVogelHeuser

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 93)

## \IWBnamesProfVolk

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 95)

## \IWBnamesProfWachtmeister

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 97)

## \IWBnamesProfWall

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 99)

#### \IWBnamesProfWalter

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 101)

#### \IWBnamesProfWerner

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 103)

#### \IWBnamesProfWeusterBotz

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 105)

#### \IWBnamesProfZaeh

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 107)

#### \IWBnamesProfZimmermann

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 109)

## \IWBnamesProfAlthoff

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 113)

## \IWBnamesProfBurschka

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 115)

#### \IWBnamesProfKnoll

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 117)

#### \IWBnamesProfPretschner

Module: IWBnames - File: source/TUM/Modules/TUMnames.sty (Line: 119)

## \IWButilsTodo[Color]{Text}

Description: Inserts a todo text.

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 24)

## \IWButilsTodoW[Color]{Text}

Description: Inserts a todo text and additionally prints a warning.

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 30)

## \IWButilsTodoSpacer[Heading]{HeightInMM}

Description: Draws a todo box of specified length.

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 36)

## \IWButilsPDFanno[Author]{Text}

Description: Inserts a PDF-comment (default color).

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 53)

#### \IWButilsPDFannoColor[Author]{Text}{Color}

Description: Inserts a PDF-comment (custom color).

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 59)

## \IWButilsPDFhigh[Color]{Text}

Description: Highlights a text as a PDF-comment.

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 65)

## \IWButilsDate{Day}{Month}{Year}

Description: Prints the specified date in german or english language.

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 74)

## \IWButilsToday

Description: Prints the current date in german or english language.

Module: IWButils - File: source/TUM/Modules/TUMutils.sty (Line: 77)

## \IWBrefSetPDFMetadata{Title}{Subject}{Author}{Keywords}{PDFCreator}{PDFProducer}

Description: Sets the PDF metadata of the document.

Module: IWBref - File: source/TUM/Modules/TUMref.sty (Line: 41)

## \IWBstudentthesisTitlePageCustom{GermanTitle}{EnglishTitle}{Author}{Supervision}{Date}{Grad1}

{Grad2}

Description: Inserts the titlepage of a student thesis. (IWB specific design)

Style: IWBstudentthesis - File: source/MW/IWB/Styles/IWBstudentthesis.sty (Line: 72)

## $\label{thm:constraint} $$ \Begin{tikzpicture}(The sis Title \Begin Title) {\Begin Title \Author} {\Begin Title \Begin Title \Author} {\Begin Title \Begin Title \Begin Title \Begin Title \Author} $$ \Begin Title \Begin Title$

Description: Inserts the titlepage of a bachelor's thesis (IWB specific design).

Style: IWBstudentthesis - File: source/MW/IWB/Styles/IWBstudentthesis.sty (Line: 111)

## \IWBstudentthesisTitlePageCustomSemesterThesis{GermanTitle}{EnglishTitle}{Author}{Supervision} {Date}

Description: Inserts the titlepage of a semester thesis (IWB specific design).

Style: IWBstudentthesis - File: source/MW/IWB/Styles/IWBstudentthesis.sty (Line: 116)

## \IWBstudentthesisTitlePageCustomMastersThesis{GermanTitle}{EnglishTitle}{Author}{Supervision} {Date}

Description: Inserts the titlepage of a master's thesis (IWB specific design).

Style: IWBstudentthesis - File: source/MW/IWB/Styles/IWBstudentthesis.sty (Line: 121)

## \IWBstudentthesisAbstract{EnglishAbstract}{GermanAbstract}

Description: Inserts the abstract (german and english) of a student thesis.

Style: IWBstudentthesis - File: source/MW/IWB/Styles/IWBstudentthesis.sty (Line: 130)

## \IWBstudentthesisPrintTableOfContents

Description: Inserts the table of contents of a student thesis.

Style: IWBstudentthesis - File: source/MW/IWB/Styles/IWBstudentthesis.sty (Line: 140)

## \IWBstudentthesisTitlePageCD{GermanTitle}{EnglishTitle}{Author}{Examiner}{Supervisor}{Date}{Grad1} {Grad2}

Description: Inserts the titlepage of a student thesis (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 15)

## $\label{thm:continuous} $$ \Begin{tikzpicture}(Bound Bound Bound$

Description: Print the actual titlepage contents of a student thesis (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 24)

## \IWBstudentthesisTitlePageFrontPageInfoTable{Supervisor}{Advisor}{Author}{Date}

Description: Prints info table for the thesis frontpage.

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 49)

## \IWBstudentthesisDeclaration{Author}{Date}

Description: Prints the declaration about scientific work.

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 60)

## \IWBstudentthesisTitlePageCDDiplomarbeit{GermanTitle}{EnglishTitle}{Author}{Examiner}{Supervisor} {Date}

Description: Inserts the titlepage of a Diplomarbeit (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 68)

## **\IWBstudentthesisTitlePageCDBachelorsThesis**{GermanTitle}{EnglishTitle}{Author}{Examiner} {Supervisor}{Date}

Description: Inserts the titlepage of a bachelor's thesis (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 72)

## **\IWBstudentthesisTitlePageCDSemesterThesis**{GermanTitle}{EnglishTitle}{Author}{Examiner} {Supervisor}{Date}

Description: Inserts the titlepage of a semester thesis (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 76)

## \IWBstudentthesisTitlePageCDMasterThesis{GermanTitle}{EnglishTitle}{Author}{Examiner}{Supervisor} {Date}

Description: Inserts the titlepage of a master's thesis (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 80)

## \IWBstudentthesisTitlePageCDIDP{GermanTitle}{EnglishTitle}{Author}{Examiner}{Supervisor}{Date}

Description: Inserts the titlepage of an IDP (according to the TUM corporate design).

Style: IWBstudentthesis - File: source/TUM/Styles/TUMstudentthesis.sty (Line: 84)

## \IWBstudentexposeTitlePage{TypeOfThesis}{ProvisionalTitle}{Author}{MatrNr}{EMail}{Supervisor}{Date}

Description: Inserts the titlepage of the expose of a student thesis.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 60)

\IWBstudentexposeHeader{TypeOfThesis}{ProvisionalTitle}{Author}{MatrNr}{EMail}{Supervisor}{Date}

Description: Inserts the header of the expose of a student thesis.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 65)

## \IWBstudentexposeTitlePageBachelorsThesis{ProvisionalTitle}{Author}{MatrNr}{EMail}{Supervisor} {Date}

Description: Inserts the titlepage of the expose of an bachelor's thesis.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 93)

## \IWBstudentexposeTitlePageSemesterThesis{ProvisionalTitle}{Author}{MatrNr}{EMail}{Supervisor}{Date}

Description: Inserts the titlepage of the expose of an semester thesis.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 95)

## \IWBstudentexposeTitlePageMastersThesis{ProvisionalTitle}{Author}{MatrNr}{EMail}{Supervisor}{Date}

Description: Inserts the titlepage of the expose of an master's thesis.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 97)

## \IWBstudentexposeTitlePageIDP{ProvisionalTitle}{Author}{MatrNr}{EMail}{Supervisor}{Date}

Description: Inserts the titlepage of the expose of an IDP.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 99)

#### \IWBstudentexposeReview

Description: Ends the document with a review section according to the TUM Center of Key Competencies template.

Style: IWBstudentexpose - File: source/TUM/Styles/TUMstudentexpose.sty (Line: 105)

## \IWBposterDrawGrid

Description: Draws a grid in the background in order to ease positioning.

Style: IWBposter - File: source/TUM/Styles/TUMposter.sty (Line: 21)

## \IWBphdprepublicationTitlePage{YourName}{Date}

Description: Create titlepage for the pre-publication list of the TUM Graduate School.

Style: IWBphdprepublication - File: source/TUM/Styles/TUMphdprepublication.sty (Line: 63)

## \IWBletterSetReceiver{Lines}

Description: Defines the receiver (multiple lines).

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 26)

#### \IWBletterSetPlace{Location}

Description: Defines the place (sender).

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 32)

#### \IWBletterSetDate{Date}

Description: Defines the date.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 38)

## \IWBletterSetSubject{Subject}

Description: Defines the subject.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 44)

## \IWBletterSetTitle{Subject}

Description: Defines the title of the sender.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 50)

## \IWBletterSetName{Subject}

Description: Defines the name of the sender.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 56)

#### \IWBletterSetPhone{Subject}

Description: Defines the phone number of the sender.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 62)

## \IWBletterSetFax{Subject}

Description: Defines the fax number of the sender.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 68)

## \IWBletterSetEMail{Subject}

Description: Defines the e-mail address of the sender.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 74)

## \IWBletterSetHomepage{Subject}

Description: Defines the homepage of the sender chair.

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 80)

## \IWBletterHeader

Description: Prints the header of the letter (sender, receiver, ...)

Style: IWBletter - File: source/TUM/Styles/TUMletter.sty (Line: 86)

## \IWBbeamerSetupHeader[TopMargin]{Content}

Description: Sets the default header and defines the top margin.

Style: IWBbeamer - File: source/TUM/Styles/TUMbeamer.sty (Line: 158)

#### \IWBbeamerSetFooterText

Description: Sets the additional text in the footer.

Style: IWBbeamer - File: source/TUM/Styles/TUMbeamer.sty (Line: 163)

## \IWBbeamerSetupFooterCD

Description: Sets the default footer according to the TUM corporate design.

Style: IWBbeamer - File: source/TUM/Styles/TUMbeamer.sty (Line: 166)

## \IWBbeamerSetupFooterSlideNumberOnly

Description: Sets the footer only displaying the slide number.

Style: IWBbeamer - File: source/TUM/Styles/TUMbeamer.sty (Line: 171)

## \IWBbeamerTitlePageDefault

Description: Creates a default titlepage (slide).

Style: IWBbeamer - File: source/TUM/Styles/TUMbeamer.sty (Line: 261)

## \IWBdocumentationModule{Name}

Description: Typesets module names for the documentation.

Style: IWBdocumentation - File: source/TUM/Styles/TUMdocumentation.sty (Line: 60)

## \IWBdocumentationStyle{Name}

Description: Typesets style names for the documentation.

Style: IWBdocumentation - File: source/TUM/Styles/TUMdocumentation.sty (Line: 62)

## \IWBdocumentationTemplate{Name}

Description: Typesets template names for the documentation.

Style: IWBdocumentation - File: source/TUM/Styles/TUMdocumentation.sty (Line: 64)

## \IWBdocumentationOption{Option}

Description: Typesets options for the documentation.

Style: IWBdocumentation - File: source/TUM/Styles/TUMdocumentation.sty (Line: 66)

## \IWBdocumentationCode{Command}

Description: Typesets code for the documentation.

Style: IWBdocumentation - File: source/TUM/Styles/TUMdocumentation.sty (Line: 68)

# $\label{thm:control} $$ \WBphdthesisTitlePage{Title}{Subtitle}{Author}{DoctoralDegree}{Chairman}{Examiner1}{Examiner2} $$ ${DateSubmission}{DateAcceptance}$$

Description: Inserts the titlepage of a phd thesis (according to the TUM corporate design).

Style: IWBphdthesis - File: source/TUM/Styles/TUMphdthesis.sty (Line: 9)

 $\label{thm:limit} $$ \WBphdexposeTitlePage{YourName}{YourEMail}{YourPhoneNumber}{ProvisionalTitle}{Supervisor}{Mentor} $$ $$ Date$$ 

Description: Create titlepage for the expose of the TUM Graduate School.

Style: IWBphdexpose - File: source/TUM/Styles/TUMphdexpose.sty (Line: 60)