

The **tumcolor** package*

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1 Introduction

This package has two purposes: to load the `xcolor` package and to define the TUM colors as specified by the corporate design¹.

If more colors are needed, consider loading **tumcolor** with *dvipsnames*, *svg-names*, or *x11names* option (see the documentation of the `xcolor` for details). Also, consider loading your very own color package. In TUM documents you should load the **tumcolor** package at the beginning of your own color definition package.

2 Installation

Install this package like any other L^AT_EX package.

The end of this file contains the installation file (`.ins`) code in case the provided `ins`-file got lost.

For style creation run `latex tumcolor.ins`. For doc/manual creation run `latex tumcolor.dtx`.

3 Dependencies

As of **tumcolor** v2.2 this package depends on

- `xcolor` and
- `pgfplots`,

if the `pgfplots` option is used.

*This document corresponds to **tumcolor** v2.2, dated 2016/07/27.

¹https://portal.mytum.de/corporatedesign/regeln/index_styleguide

4 Package Options

`pgfplots` Provides a plot cycle list according to the corporate design.

5 Official TUM Colors Provided

5.1 Basic Colors

TUMBlack	TUMWhite
TUMBlue [Pantone 300]	TUMGray

5.2 Additional Blues

TUMBlueDarkest [Pantone 540]	TUMBlueDarker [Pantone 301]
TUMBlueLighter [Pantone 542]	TUMBlueLightest [Pantone 283]

Shades Of course, shades can be generated in the usual way using the `xcolor` syntax `color!number`, but as these shades are also in the official corporate design guidelines, they are included as well.

TUMBlueDarkest80	TUMBlueDarkest80
TUMBlueDarker80	TUMBlueDarker50
TUMBlueDarkest50	TUMBlueDarker20
TUMBlueDarkest20	TUMBlueLightest80
TUMBlueLighter80	TUMBlueLightest50
TUMBlueLighter50	TUMBlueLightest20
TUMBlueLighter20	

5.3 Highlight Colors

TUMGreen	TUMOrange
TUMIvory	

6 Presentation Colors

6.1 PowerPoint Colors

TUMPPTOrange	TUMPPTGreen
TUMPPTBlue4	TUMPPTBlue3

TUMPPTBlue2

TUMPPTGray

TUMPPTBlue1

TUMPPTBlueLight

6.2 Additional Beamer Colors

NOTE: These colors are only suggested ones (i.e. rather unofficial).

TUMBeamerYellow

TUMBeamerRed

TUMBeamerBlue

TUMBeamerGreen

TUMBeamerOrange

TUMBeamerDarkRed

TUMBeamerLightBlue

TUMBeamerLightGreen

7 PGFPLOTS Cycle List

Using the package option `pgfplots`, a cycle list named `tum` is created, which generates plots like in the example figure Figure 1.

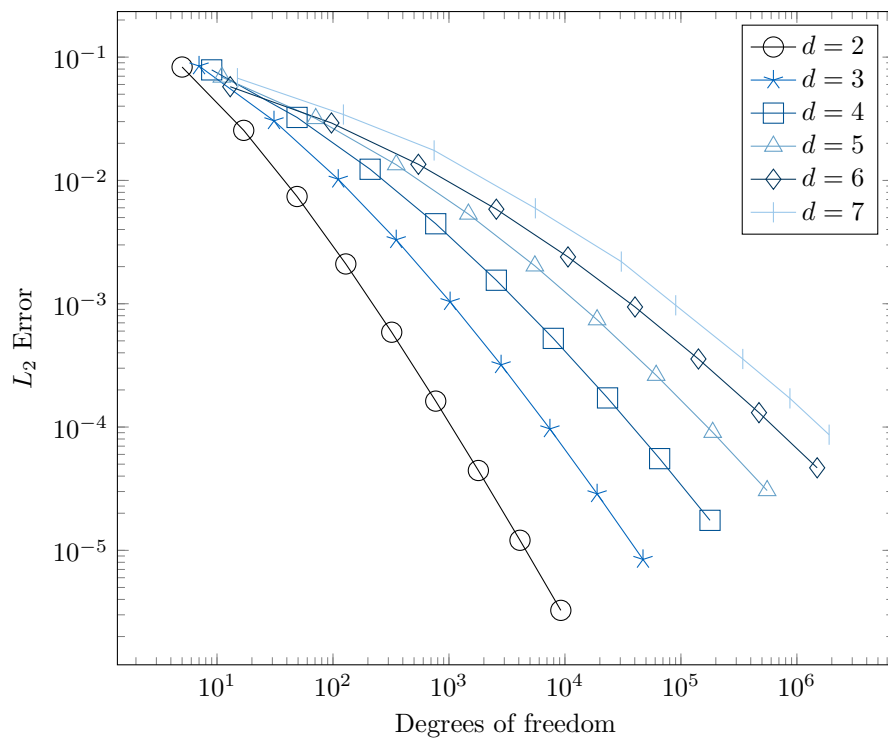


Figure 1: Example Plot.

There is also a style for bar charts provided.

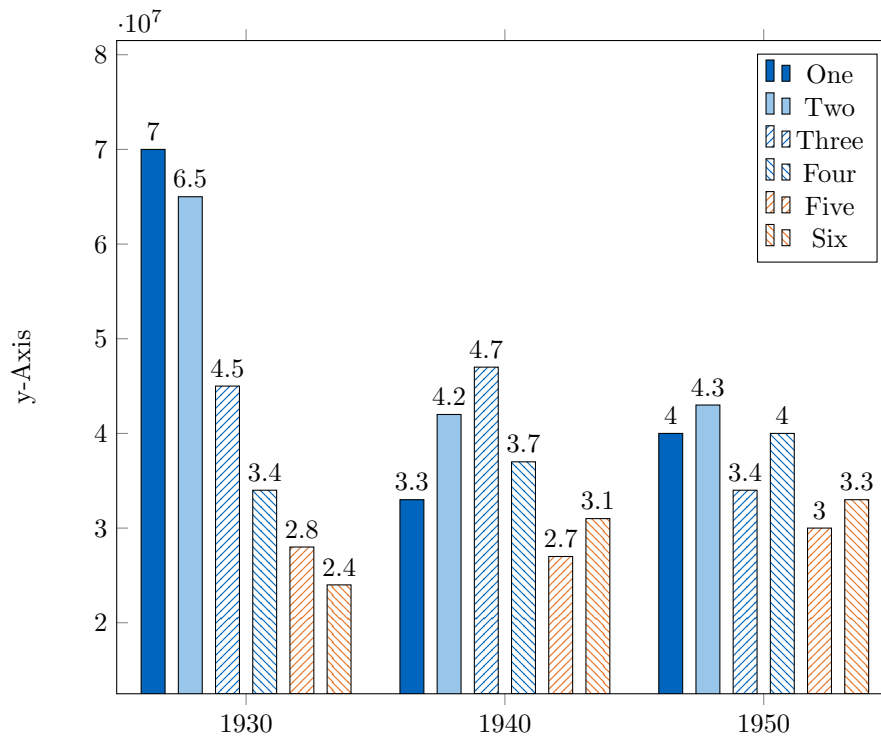


Figure 2: Example Barchart.

8 Implementation

8.1 Package Options

PGF option.

```

1 \newif\ifpgfplots\pgfplotsfalse
2 \DeclareOption{pgfplots}{\pgfplotstrue}%
   Pass all remaining options to xcolor.
3 \DeclareOption*{\PassOptionsToPackage{\CurrentOption}{xcolor}}%
4 \ProcessOptions\relax%
```

8.2 Load xcolor with Options

As this package depends on the xcolor package, we pass all options to this very package.

```

5 \RequirePackageWithOptions{xcolor}%
```

8.3 Load pgfplots

In case the plot cycle list is also requested.

```
6 \ifpgfplots
7   \RequirePackage{pgfplots}%
8   \RequirePackage{pgfplotstable}%
9   \tikzset{>=stealth}%
10  \usetikzlibrary{patterns}%
11  \usetikzlibrary{pgfplots.statistics}%
12 \fi
```

8.4 Define Official TUM Colors

The official TUM colors as defined in

https://portal.mytum.de/corporatedesign/regeln/index_styleguide.

8.4.1 Print Colors

Black, Gray, and White is a must have.

```
13 \definecolorset{RGB}{TUM}{-}{%
14 Black,  0,  0,  0;%
15 Gray,   51, 51, 51;%
16 White, 255, 255, 255;%
```

The official TUM Blue [Pantone 300 C].

```
17 Blue, 0, 101, 189;%
```

Highlighting colors.

```
18 Ivory,  218, 215, 203;%
19 Orange, 227, 114,  34;%
20 Green,  162, 173,   0;%
21 }%
```

Gray tones [50 / 20 percent black].

```
22 \definecolorset{RGB}{TUMGray}{-}{%
23 Lighter, 128, 128, 128;%
24 Lightest, 204, 204, 204;%
25 }%
```

Four more TUM blues. All Pantone. [Pantone 540 C / Pantone 301 C /
Pantone 542 C / Pantone 283 C].

```
26 \definecolorset{RGB}{TUMBlue}{-}{%
27 Darkest,  0,  51,  89;%
28 Darker,   0,  82, 147;%
29 Lighter, 100, 160, 200;%
30 Lightest, 152, 198, 234;%
31 }%
```

Also the official shades [80, 50, 20] of these four base colors.

```
32 \colorlet{TUMBlueDarkest80}{TUMBlueDarkest!80}%
33 \colorlet{TUMBlueDarkest50}{TUMBlueDarkest!50}%
```

```

34 \colorlet{TUMBlueDarkest20}{TUMBlueDarkest!20}%
35 \colorlet{TUMBlueDarker80}{TUMBlueDarker!80}%
36 \colorlet{TUMBlueDarker50}{TUMBlueDarker!50}%
37 \colorlet{TUMBlueDarker20}{TUMBlueDarker!20}%
38 \colorlet{TUMBlueLighter80}{TUMBlueLighter!80}%
39 \colorlet{TUMBlueLighter50}{TUMBlueLighter!50}%
40 \colorlet{TUMBlueLighter20}{TUMBlueLighter!20}%
41 \colorlet{TUMBlueLightest80}{TUMBlueLightest!80}%
42 \colorlet{TUMBlueLightest50}{TUMBlueLightest!50}%
43 \colorlet{TUMBlueLightest20}{TUMBlueLightest!20}%

```

8.4.2 Slide Colors

Colors used in the PowerPoint template

```

44 \definecolorset{RGB}{TUMPPT}{}{%
45 Orange,    227, 114, 34;%
46 Green,     162, 173, 0;%
47 Blue4,     100, 160, 200;%
48 Blue3,      0, 115, 207;%
49 Blue2,      0, 82, 147;%
50 Blue1,      0, 51, 89;%
51 BlueLight,  0, 101, 189;%
52 Gray,       51, 51, 51%
53 }%

```

Suggested TUM colors for beamer presentations. All RGB. [RGB 255,180,000 / RGB 255,128,000 / RGB 229,052,024 / RGB 202,033,063 RGB 000,153,255 / RGB 065,190,255 / RGB 145,172,107 / RGB 181,202,130].

```

54 \definecolorset{rgb}{TUMBeamer}{}{%
55 Yellow,     1.00, 0.71, 0.00;%
56 Orange,     1.00, 0.50, 0.00;%
57 Red,        0.90, 0.20, 0.09;%
58 DarkRed,    0.79, 0.13, 0.25;%
59 Blue,       0.00, 0.60, 1.00;%
60 LightBlue,  0.25, 0.75, 1.00;%
61 Green,      0.57, 0.67, 0.42;%
62 LightGreen, 0.71, 0.79, 0.51%
63 }%

```

8.5 Plot Cycle List for PGFPLOTS

```

64 \ifpgfplots
65 \pgfplotscreateplotcyclelist{tum}{%
66 {color = TUMBlack,      mark = o,          mark size = 3.8},%
67 {color = TUMBlue,       mark = star,        mark size = 3.8},%
68 {color = TUMBlueDarker, mark = square,      mark size = 3.8},%
69 {color = TUMBlueLighter, mark = triangle,   mark size = 3.8},%
70 {color = TUMBlueDarkest, mark = diamond,   mark size = 3.8},%
71 {color = TUMBlueLightest, mark = |,        mark size = 3.8},%
72 %%

```

```

73 {color = TUMBlack,          mark = *,          mark size = 3.8},%
74 {color = TUMBlue,          mark = 10-pointed star, mark size = 3.8},%
75 {color = TUMBlueDarker,    mark = square*,      mark size = 3.8},%
76 {color = TUMBlueLighter,   mark = triangle*,    mark size = 3.8},%
77 {color = TUMBlueDarkest,   mark = diamond*,      mark size = 3.8},%
78 {color = TUMBlueLightest,  mark = Mercedes star flipped, mark size = 3.8}%
79 }%
80 \pgfplotsset{/pgfplots/bar cycle list/.style={/pgfplots/cycle list={%
81     {black, mark = none, fill = TUMBlue},%
82     {black, mark = none, fill = TUMBlueLightest},%
83     {black, mark = none, pattern = north east lines, pattern color = TUMBlue},%
84     {black, mark = none, pattern = north west lines, pattern color = TUMBlue},%
85     {black, mark = none, pattern = north east lines, pattern color = TUMOrange},%
86     {black, mark = none, pattern = north west lines, pattern color = TUMOrange},%
87     {black, mark = none, pattern = horizontal lines, pattern color = TUMOrange},%
88     {black, mark = none, pattern = crosshatch,      pattern color = TUMOrange}%
89     }%
90 }%
91 }%
92 \fi

```

8.5.1 Aliases

Some additional aliases to make commonly used colors more recognizable.

Legacy colors.

```

93 \colorlet{TUMDarkBlue}{TUMBlueDarkest}%
94 \colorlet{TUMDarkerBlue}{TUMBlueDarker}%
95 \definecolor{TUMMediumBlue}{cmyk}{0.90,0.48,0.00,0.00}%
96 \colorlet{TUMLighterBlue}{TUMBlueLighter}%
97 \colorlet{TUMLightBlue}{TUMBlueLightest}%
98 \colorlet{TUMDarkGray}{TUMGray}%
99 \colorlet{TUMMediumGray}{TUMGrayLighter}%
100 \colorlet{TUMLightGray}{TUMGrayLightest}%

```

Change History

v1.0		v2.1
General: Initial version.	1	General: Changed colors according to new corporate design.
v2.0		1
General: Changed color definition method.	1	v2.2
		General: Add PGF support by providing a plot cycle list.
		1