

Trigon

A Modern, elegant and versatile theme for Beamer

Thomas Lambert
trigon@thl.ovh

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1 Introduction

Trigon found its origin and inspiration in the graphical guidelines resulting from the visual identity overhaul of the [Univeristy of Liège](#) (Belgium).

Although directly inspired from these guidelines, Trigon was stripped out of any mention or specificities related the University and its faculties. This makes the Trigon theme perfectly suitable for many different contexts.

The final product provides a modern, elegant and versatile theme with a high degree of customization.

Trigon's codebase lives on [Gitlab](#). The implementation of this theme is strongly inspired from the excellent [Metropolis](#) theme by Matthias Vogelgesang, from which it borrows numerous options.

Any feature request, issue report or merge requests are welcome.

2 Getting Started

2.1 Installing from Gitlab

If you want to use the cutting-edge development version of Trigon, you can install it manually by following these steps:

Download the source from [Trigon repository](#) using `git clone` or as a [zip archive](#) of the latest development version.

Compile the style files by running `make sty` inside the downloaded directory. (Or run `LATeX` directly on `source/trigontheme.ins`.)

Move the resulting `*.sty` files to the folder containing your presentation. To use Trigon with many presentations, run `make install` or move the `*.sty` files to a folder in your `TEx` path instead.

Use the theme by declaring `\usetheme{trigon}` in the preamble of your document.

Trigon uses the Make build system to offer the following installation options for advanced users:

`make sty` builds the theme style files.

`make doc` builds this documentation manual.

`make demo` builds a demo presentation to test the features of Trigon.

`make all` builds the theme and manual.

`make clean` removes the files generated by `make all`.

`make install` installs the theme into your local texmf folder.

`make uninstall` removes the theme from your local texmf folder.

2.2 Other install methods

Trigon will be proposed for integration on [CTAN](#) shortly. It will then hopefully be integrated to texlive, miktex, etc. In the meantime, only the installation from Gitlab is possible.

Once accepted on CTAN, the theme will also be made available on [Overleaf](#).

2.3 A Minimal Example

The following code shows a minimal example of a Beamer presentation using Trigon.

```
\documentclass{beamer}
\usepackage{trigon}           % Use trigon theme
\title{A minimal example}
\subtitle{A subtitle example}
\date{\today}
\author{Thomas Lambert}
\institute{Your university or company}
\begin{document}
\maketitle
\section{First Section}
\begin{frame}{First Frame}
Hello, world!
\end{frame}
```

```
\end{document}
```

2.4 Dependencies

Trigon depends on the `beamer` class and the following standard packages:

- `tikz`
- `pgfplots`

The theme works best with the open source [Source Sans Pro](#) font from Adobe. Therefore, the package `sourcesanspro` is loaded by default with the theme. However, if the user prefers to select an other font, the theme option `nosourcefonts` can be used to prevent the font package from being loaded.

3 Customization

3.1 Package options

Trigon provides a number of options, which can be set using a key=value interface. The primary way to set options is to provide a comma-separated list of option-value pairs when loading Trigon in the preamble:

```
\usetheme[option1=value1, option2=value2, ...]{trigon}
```

Options can be changed at any time — even mid-presentation! — with the `\trigonsset` macro.

```
\trigonsset{option1=newvalue1, option2=newvalue2, ...}
```

The list of options is structured as shown in the following example.

<code>option key</code>	<code>list of possible values</code>	<code>default</code>
-------------------------	--------------------------------------	-------	----------------------

A short description of the option.

As Trigon implementation is heavily inspired from the excellent [Metropolis](#) theme by Matthias Vogelgesang, many of Metropolis options are also available in Trigon.

3.1.1 Main theme

titleformat `regular, smallcaps, allsmallcaps, allcaps` regular
Changes the format of titles, subtitles, section titles, frame titles, and the text on “standout” frames. The available options produce Regular, SmallCaps, allsmallcaps, or ALLCAPS titles. Please refer to Section 5.1 for known issues with these options.

usesourcefonts `true, false` true
Chooses if the `sourcesanspro` font package should be loaded `true` or not `false`.

3.1.2 Inner theme

sectionpage `none, simple` simple
Adds a slide at the start of each section (`simple`). The `none` option disables the section page.

titlestyle `plain, style1, style2` style2
Changes the layout of the title page.



plain



style1

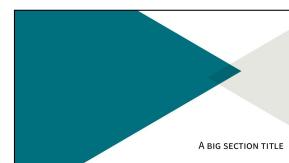


style2 (default)

sectionstyle `plain, style1, style2, style3` plain
Changes the layout of the section page. `style3` is similar to `plain` but with the right triangle in grey instead of theme color.



plain (default)



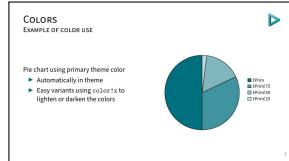
style1



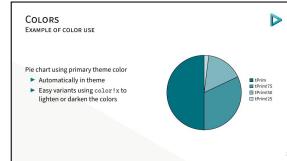
style2

slidestyle `blank, style1, cyber` `blank`

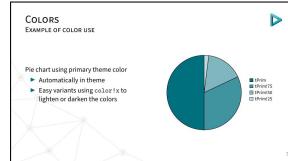
Changes the background of the regular frames.



blank (default)



style1



cyber

3.1.3 Outer theme

numbering `none, counter, fraction` `counter`

Controls whether the frame number at the bottom right of each slide is omitted (`none`), shown (`counter`) or displayed as a fraction of the total number of frames (`fraction`).

3.1.4 Color theme

block `transparent, fill` `fill`

Optionally adds a light grey background to block environments like `theorem` and `example`.

headingcolor `black, theme` `black`

Controls weather the color of all headings (title page, frame title, etc.) should be in `black` in a slightly darker shade of the theme color `theme`.

textcolor `black, theme` `black`

Controls weather the color of the regular text elements should be in `black` in a slightly darker shade of the theme color `theme`.

3.1.5 Font theme

titleformat title `regular, smallcaps, allsmallcaps, allcaps` `regular`
titleformat subtitle
titleformat section
titleformat frame Individually controls the format of titles, subtitles, section titles, and frame titles (see `titleformat`, above).

3.2 Color Customization

The included Trigon color theme is used by default, but its colors can be easily changed to suit your tastes. All of the theme's styles are defined in terms of four colors:

- `tPrim` The primary theme color, used for main triangle elements, and for headings and text if the appropriate options are selected.
- `tSec` The secondary theme color (lighter shade of the primary color), used for some triangle elements and example text.
- `tAccent` The accent color, used mostly for alerted text.
- `tGrey` A grey color, used for background elements (triangles, blocks, etc.).

An easy way to customize the theme is to redefine these colors using

```
\colorlet{tPrim}{ ... }
\colorlet{tSec}{ ... }
\colorlet{tAccent}{ ... }
\colorlet{tGrey}{ ... }
```

in your preamble.

4 Tips & Tricks

4.1 Backup Slides

Speakers will often include extra slides at the end of their presentation to refer to during audience questions. One easy way to do this is to include the `appendixnumberbeamer` package in your preamble and call `\appendix` before your backup slides.

Trigon will automatically turn off slide numbering for slides in the appendix.

5 Known Issues

5.1 Title formats

Be aware that not every font supports small caps, so the `smallcaps` or `allsmallcaps` options may not work if you use a font other than `sourcesanspro`.

The title format options `allsmallcaps` and `allcaps` are quite nice from an aesthetic point of view, but their use of `\MakeLowercase` and `\MakeUppercase` can cause unexpected problems. For example:

- Some commands, like `\\"`, do not work inside `\MakeLowercase` and `\MakeUppercase`. (See Metropolis [#125](#))
- Only alphabetic characters are affected by `\MakeLowercase`, so numerals and punctuation remain at full height. This can spoil some of the aesthetic benefits of `allsmallcaps`. (See Metropolis [#33](#))
- `\MakeLowercase` and `\MakeUppercase` apply to math mode and `\scshape` does not. This can easily introduce mathematical errors that are hard to catch.
- It is impossible to typeset symbols which are encoded as uppercase letters in a different font. In particular, `\mathbb` and `\mathcal` letters will be replaced by other math glyphs. (See Metropolis [#153](#))

The `allsmallcaps` and `allcaps` options are safe to use if your titles contain only alphabetic characters and do not require the expansion of any macros.

6 License

Trigon is licensed under the terms of the [Creative Commons Attribution-ShareAlike 4.0](#) license.

7 Implementation

7.1 Trigon parent theme

The primary job of this package is to load the component sub-packages of the Trigon theme and route the theme options accordingly. It also provides some custom commands and environments for the user.

7.1.1 Package dependencies

```
1 \RequirePackage{pgfopts}
2 \RequirePackage{tikz}
```

7.1.2 Options

Most options are passed off to the component sub-packages.

```
3 \pgfkeys{/trigon/.cd,
4   .search also={
5     /trigon/inner,
6     /trigon/outer,
7     /trigon/color,
8     /trigon/font
9   }
10 }
```

`titleformat plain` Controls the formatting of the text on standout “plain” frames.

```
11 \pgfkeys{
12   /trigon/titleformat plain/.cd,
13   .is choice,
14   regular/.code={%
15     \let\trigon@plaintitleformat\empty%
16     \setbeamerfont{standout}{shape=\normalfont}%
17   },
18   smallcaps/.code={%
19     \let\trigon@plaintitleformat\empty%
20     \setbeamerfont{standout}{shape=\scshape}%
21   },
22   allsmallcaps/.code={%
23     \let\trigon@plaintitleformat\MakeLowercase%
24     \setbeamerfont{standout}{shape=\scshape}%
25     \PackageWarning{beamerthemetrigon}{%
26       Be aware that titleformat plain=allsmallcaps can lead to problems%
27     }
28   },
29   allcaps/.code={%
30     \let\trigon@plaintitleformat\MakeUppercase%
31     \setbeamerfont{standout}{shape=\normalfont}%
32     \PackageWarning{beamerthemetrigon}{%
33       Be aware that titleformat plain=allcaps can lead to problems%
34     }
35   },
36 }
```

titleformat Sets a standard format for titles, subtitles, section titles, frame titles, and the text on standout “plain” frames.

```
37 \pgfkeys{  
38   /trigon/titleformat/.code=\pgfkeysalso{  
39     font/titleformat title=#1,  
40     font/titleformat subtitle=#1,  
41     font/titleformat section=#1,  
42     font/titleformat frame=#1,  
43     titleformat plain=#1,  
44   }  
45 }
```

usesourcefonts Select whereas the Source Sans Pro font is being loaded automatically or not.

```
46 \newif\if@trigon@usesourcefonts  
47 \pgfkeys{/trigon/.cd,  
48   usesourcefonts/.is if=@trigon@usesourcefonts,  
49   usesourcefonts=true,  
50 }
```

7.1.3 Component sub-packages

Having processed the options, we can now load the component sub-packages of the theme.

```
51 \useinnertheme{trigon}  
52 \useoutertheme{trigon}  
53 \usecolortheme{trigon}  
54 \usefonttheme{trigon}
```

7.1.4 Custom commands

The parent theme defines custom commands as their proper usage may depend on multiple sub-packages.

\metroset Allows the user to change options midway through a presentation.

```
55 \newcommand{\trigerset}[1]{\pgfkeys{/trigon/.cd,#1}}
```

7.1.5 Process package options

```
56 \ProcessOptionsBeamer
57 \ProcessPgfOptions{/trigon}
58 \if@trigon@usesourcefonts%
59   \RequirePackage[default,t1,semibold]{sourcesanspro}
60 \fi
```

7.2 Trigon inner theme

A **beamer** inner theme dictates the style of the frame elements traditionally set in the “body” of each slide. These include:

- title, part, and section pages;
- main background elements;
- itemize, enumerate, and description environments;
- block environments including theorems and proofs;
- figures and tables; and
- footnotes and plain text.

7.2.1 Package dependencies

```
61 \RequirePackage{pgfopts}
62 \RequirePackage{tikz}
63 \usetikzlibrary{calc,3d}
```

7.2.2 Definitions

We define the command `\logobig` to specify the logo that needs to be applied displayed on the title frame.

```
64 \def\logobig{}
65 \newcommand\biglogo[1]{
66   \def\logobig{\#1}
67 }
```

7.2.3 Options

sectionpage Controls whereas a slide with the section title should be inserted at the beginning of the section or not.

```

68 \pgfkeys{
69 /trigon/inner/sectionpage/.cd,
70 .is choice,
71 none/.code=\trigon@disablesectionpage,
72 simple/.code=\trigon@enablesectionpage
73 }

```

slidestyle Controls the layout that should be used for regular slides.

```

74 \def\slidestyle{}
75 \pgfkeys{
76 /trigon/inner/slidestyle/.cd,
77 .is choice,
78 blank/.code=\def\slidestyle{blank},
79 style1/.code=\def\slidestyle{smallcornertriangle},
80 cyber/.code=\def\slidestyle{cyberbottom}
81 }

```

titlestyle Controls the layout that should be used for the title page.

```

82 \def\titlestyle{}
83 \pgfkeys{
84 /trigon/inner/titlestyle/.cd,
85 .is choice,
86 plain/.code=\def\titlestyle{bottomtrianglescolor},
87 style1/.code=\def\titlestyle{titlesmallimage},
88 style2/.code=\def\titlestyle{titlebigimage}
89 }

```

sectionstyle Controls the layout that should be used for the title page.

```

90 \def\sectionstyle{}
91 \pgfkeys{
92 /trigon/inner/sectionstyle/.cd,
93 .is choice,
94 plain/.code=\def\sectionstyle{bottomtrianglescolor},
95 style1/.code=\def\sectionstyle{bigtriangles},
96 style2/.code=\def\sectionstyle{lefttriangles},
97 style3/.code=\def\sectionstyle{bottomtrianglesbw}
98 }

```

```
\trigon@inner@setdefaults Sets default values for the inner theme options.
```

```
99 \newcommand{\trigon@inner@setdefaults}{  
100 \pgfkeys{/trigon/inner/.cd,  
101 sectionpage=simple,  
102 slidestyle=blank,  
103 titlestyle=style2,  
104 sectionstyle=plain  
105 }  
106 }
```

7.2.4 Backgrounds

First of all, we define a few commands in order easily create the triangles used as the main design elements of the theme. All these are defined with respect to the `\paperwidth` and `\paperheight` of the document, so that it fits the different aspect ratio possible.

```
\leftTriangle Defines a triangle with the base on the left side (pointing right).
```

```
107 \newcommand{\leftTriangle}[2]{  
108 (#1,#2)  
109 -- (0,{#2 + tan(30)*#1} )  
110 -- (0,{#2 - tan(30)*#1} )  
111 -- cycle;  
112 }
```

```
\rightTriangle Defines a triangle with the base on the right side (pointing left).
```

```
113 \newcommand{\rightTriangle}[2]{  
114 (#1,#2)  
115 -- (\the\paperwidth,{#2 + tan(30)*(\the\paperwidth-#1)} )  
116 -- (\the\paperwidth,{#2 - tan(30)*(\the\paperwidth-#1)} )  
117 -- cycle;  
118 }
```

```
\topTriangle Defines a triangle with the base on the bottom side (pointing top).
```

```
119 \newcommand{\topTriangle}[2]{  
120 (#1,#2)  
121 -- ({#1 - tan(60)*#2},0)
```

```

122 -- (<{#1 + tan(60)*#2},0)
123 -- cycle;
124 }

```

\leftColorTriangle Defines a colored triangle with the base on the left side (pointing right).

```

125 \newcommand{\leftColorTriangle}[3]{
126 \path[fill=#3]
127 \leftTriangle{#1}{#2}
128 }

```

\rightColorTriangle Defines a colored triangle with the base on the right side (pointing left).

```

129 \newcommand{\rightColorTriangle}[3]{
130 \path[fill=#3]
131 \rightTriangle{#1}{#2}
132 }

```

\topColorTriangle Defines a colored triangle with the base on the bottom side (pointing top).

```

133 \newcommand{\topColorTriangle}[3]{
134 \path[fill=#3]
135 \topTriangle{#1}{#2}
136 }

```

We then define the different backgrounds choices.

blank Blank slide background.

```
137 \defbeamertemplate{background}{blank}{}{}
```

smallcornertriangle Background with a small triangle in bottom left corner (used for normal frames when the appropriate option is selected).

```

138 \defbeamertemplate{background}{smallcornertriangle}{
139 \begin{tikzpicture}[blend group=multiply]
140 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);
141 \leftColorTriangle{0.62\paperwidth}{0}{tGrey!30}
142 \end{tikzpicture}
143 }

```

`cyberbottom` Background with "mesh" effect on the bottom left corner (used for normal frames when the appropriate option is selected).

```

144 \defbeamertemplate{background}{cyberbottom}{
145 \tikzstyle{cyberVertex}=[scale=1,draw=tGrey!60,circle,fill=white]
146 \tikzstyle{cyberVertex2}=[scale=0.5,draw=tGrey!60,circle,fill=tGrey!60]
147 \tikzstyle{cyberEdge} = [draw,color=tGrey!60]
148 \begin{tikzpicture}[blend group=multiply]
149 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);
150 \foreach \pos/\name in {
151 {(-0.05\paperwidth,0.75\paperheight)/0},
152 {(0.02\paperwidth,0.53\paperheight)/1},
153 {(-0.04\paperwidth,0.38\paperheight)/2},
154 {(0.08\paperwidth,0.40\paperheight)/3},
155 {(0.052\paperwidth,0.21\paperheight)/5},
156 {(0.24\paperwidth,0.26\paperheight)/6},
157 {(-0.08\paperwidth,-0.06\paperheight)/7},
158 {(0.12\paperwidth,0.07\paperheight)/8},
159 {(0.2\paperwidth,0.-0.08\paperheight)/9},
160 {(0.38\paperwidth,0.06\paperheight)/10},
161 {(0.56\paperwidth,-0.08\paperheight)/11}}
162 \node[cyberVertex] (\name) at \pos {};
163 \foreach \pos/\name in {
164 {(-0.05\paperwidth,0.75\paperheight)/0},
165 {(0.02\paperwidth,0.53\paperheight)/1},
166 {(-0.04\paperwidth,0.38\paperheight)/2},
167 {(0.08\paperwidth,0.40\paperheight)/3},
168 {(0.052\paperwidth,0.21\paperheight)/5},
169 {(0.24\paperwidth,0.26\paperheight)/6},
170 {(-0.08\paperwidth,-0.06\paperheight)/7},
171 {(0.12\paperwidth,0.07\paperheight)/8},
172 {(0.2\paperwidth,0.-0.08\paperheight)/9},
173 {(0.38\paperwidth,0.06\paperheight)/10},
174 {(0.56\paperwidth,-0.08\paperheight)/11}}
175 \node[cyberVertex2] (\name_2) at \pos {};
176 \foreach \source/ \dest in
177 {0/1,1/2,1/3,2/3,2/5,3/5,3/6,5/6,5/7,7/8,5/8,8/6,8/9,6/9,9/10,10/6,10/11}
178 \path[cyberEdge] (\source) -- (\dest);
179 \end{tikzpicture}
180 }
```

titlebigimage Background for title page with a big image in the top left corner.

```
181 \defbeamertemplate{background}{titlebigimage}{  
182 \begin{tikzpicture}  
183 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);  
184 \begin{scope}[blend group=multiply]  
185 \path[fill=tPrim]\leftTriangle{0.5\paperwidth}{0};  
186 \topColorTriangle{0.73\paperwidth}{0.70\paperheight}{tGrey!30};  
187 \ifx\inserttitlegraphic\empty  
188 \leftColorTriangle{0.73\paperwidth}{0.70\paperheight}{tPrim}  
189 \else  
190 \path[clip]\leftTriangle{0.73\paperwidth}{0.70\paperheight};  
191 \node[anchor=north west, inner sep=0pt, outer sep=0pt] at (0,\the\paperheight) {\inserttitlegraphic};  
192 \fi  
193 \end{scope}  
194 \path[fill=white]\rightTriangle{0.45\paperwidth}{\the\paperheight};  
195 \ifx\logbig\empty \else  
196 \node[anchor=north east,inner sep=0mm] at  
197 (.96*\the\paperwidth,.96*\the\paperheight) {\includegraphics[width=0.28\textwidth]{\logbig}};  
198 \fi  
199 \end{tikzpicture}  
200 }
```

titlesmallimage Background for the titlepage with a small image in the top left corner.

```
201 \defbeamertemplate{background}{titlesmallimage}{  
202 \begin{tikzpicture}[blend group=multiply]  
203 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);  
204 \leftColorTriangle{0.58\paperwidth}{0}{tGrey!30}  
205 \ifx\logbig\empty \else  
206 \node[anchor=north east,inner sep=0mm] at (.94*\the\paperwidth,.94*\the\paperheight) {\includegraphics[width=0.28\textwidth]{\logbig}};  
207 \fi  
208 \ifx\inserttitlegraphic\empty  
209 \leftColorTriangle{0.58\paperwidth}{\the\paperheight}{tPrim}  
210 \else  
211 \path[clip]\leftTriangle{0.58\paperwidth}{\the\paperheight};  
212 \node[anchor=north west, inner sep=0pt, outer sep=0pt] at (0,\the\paperheight) {\inserttitlegraphic};  
213 \fi  
214 \end{tikzpicture}  
215 }
```

bottomtrianglescolor Background for title/section pages with two colored triangles in the bottom.

```
216 \defbeamertemplate{background}{bottomtrianglescolor}{  
217 \begin{tikzpicture}[blend group=multiply]  
218 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);  
219 \leftColorTriangle{0.62\paperwidth}{0}{tPrim}  
220 \rightColorTriangle{0.38\paperwidth}{0}{tSec}  
221 \end{tikzpicture}  
222 }
```

bottomtrianglesbw Background for title/section pages with two black and white triangles in the bottom.

```
223 \defbeamertemplate{background}{bottomtrianglesbw}{  
224 \begin{tikzpicture}[blend group=multiply]  
225 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);  
226 \leftColorTriangle{0.62\paperwidth}{0}{tPrim}  
227 \rightColorTriangle{0.38\paperwidth}{0}{tGrey}  
228 \end{tikzpicture}  
229 }
```

bigtriangles Background for section pages with a big triangle on the left.

```
230 \defbeamertemplate{background}{bigtriangles}{  
231 \begin{tikzpicture}[blend group=multiply]  
232 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);  
233 \leftColorTriangle{0.80\paperwidth}{0.62\paperheight}{tPrim}  
234 \rightColorTriangle{0.68\paperwidth}{0.58\paperheight}{tGrey}  
235 \end{tikzpicture}  
236 }
```

lefttriangles Background for section pages with small triangles on the left.

```
237 \defbeamertemplate{background}{lefttriangles}{  
238 \begin{tikzpicture}[blend group=multiply]  
239 \useasboundingbox (0,0) rectangle(\the\paperwidth,\the\paperheight);  
240 \leftColorTriangle{0.52\paperwidth}{\the\paperheight}{tPrim}  
241 \leftColorTriangle{0.775\paperwidth}{0}{tGrey}  
242 \end{tikzpicture}  
243 }
```

Before anything, the regular frame background is selected.

```
244 \setbeamertemplate{background}{\slidestyle}
```

Finally, we need to set the backgrounds properly before creating the different frames, create the special frames (title, section) and restore the regular background afterwards.

\titleframe Sets the titleframe.

```
245 \newcommand{\titleframe}{  
246 \setbeamertemplate{title page}{\titlestyle}  
247 \setbeamertemplate{background}{\titlestyle}  
248 \frame[plain,noframenumbering]{\titlepage}  
249 \setbeamertemplate{background}{\slidestyle}  
250 }
```

\sectionframe Sets the titleframe.

```
251 \newcommand{\sectionframe}{  
252 \setbeamertemplate{section page}{\sectionstyle}  
253 \setbeamertemplate{background}{\sectionstyle}  
254 \frame[plain,noframenumbering]{\sectionpage}  
255 \setbeamertemplate{background}{\slidestyle}  
256 }  
257 \newcommand{\trigon@disablesectionpage}{  
258 \AtBeginSection{  
259 % intentionally empty  
260 }  
261 }  
262 \newcommand{\trigon@enablesectionpage}{  
263 \AtBeginSection{  
264 \sectionframe  
265 }  
266 }
```

7.2.5 Layout

The following macros define the proper position of the various elements of the frame, so the fit nicely with the different background selected.

titlebigimage Place the text on the title frame with a big image on the top left side.

```
267 \defbeamertemplate{title page}{titlebigimage}
268 {
269 \vskip140pt
270 \begin{flushright}
271 \begin{minipage}[t][][c]{0.5\textwidth}%
272 \centering
273 \usebeamerfont{title}\usebeamercolor[fg]{title}
274 \inserttitle\par
275 \end{minipage}
276 \ifx \insertsubtitle\empty
277 \else
278 \vskip15pt
279 \begin{minipage}[t][][c]{0.5\textwidth}%
280 \centering
281 \usebeamerfont{subtitle}\insertsubtitle\par%
282 \end{minipage}
283 \fi
284 \vskip15pt
285 \begin{minipage}[t][][c]{0.5\textwidth}%
286 \centering
287 \usebeamerfont{author}\insertauthor%
288 \vskip10pt
289 \usebeamerfont{date}\insertdate%
290 \end{minipage}
291 \end{flushright}
292 \vfill
293 }
```

titlesmallimage Place the text on the title frame with a small image on the top left side.

```
294 \defbeamertemplate{title page}{titlesmallimage}
295 {
296 \vskip140pt%
297 \begin{beamercolorbox}[wd=\textwidth,sep=4pt]{title page header}
298 \usebeamerfont{title}\usebeamercolor[fg]{title}\inserttitle\par%
299 \end{beamercolorbox}%
300 \ifx \insertsubtitle\empty
301 \else
302 \vskip8pt
```

```

303 \begin{beamercolorbox}[wd=\textwidth,sep=4pt]{subtitle page header}
304 \usebeamerfont{subtitle}\insertsubtitle\par%
305 \end{beamercolorbox}%
306 \fi
307 \vskip10pt
308 \begin{beamercolorbox}[wd=\textwidth,sep=4pt]{author}
309 \usebeamerfont{author}\insertauthor%
310 \end{beamercolorbox}
311 \vskip2pt%
312 \begin{beamercolorbox}[wd=\textwidth,sep=4pt]{date}
313 \usebeamerfont{date}\insertdate%
314 \end{beamercolorbox}
315 \vfill
316 }

```

bottomtrianglescolor Place the text on the title frame with two triangles on the bottom.

```

317 \defbeamertemplate{title page}{bottomtrianglescolor}
318 {
319 \vskip0pt
320 \begin{center}
321 \begin{minipage}[t][][t]{\textwidth}
322 \centering%
323 \ifx\logbig\empty\else
324 \includegraphics[height=0.15\textheight]{\logbig}
325 \fi
326 \end{minipage}
327 \vskip15pt
328 \begin{minipage}[t][][c]{\textwidth}%
329 \centering
330 \usebeamerfont{title}\usebeamercolor[fg]{title}
331 \inserttitle\par
332 \end{minipage}
333 \ifx \insertsubtitle\empty
334 \else
335 \vskip15pt
336 \begin{minipage}[t][][c]{\textwidth}%
337 \centering
338 \usebeamerfont{subtitle}\insertsubtitle\par%
339 \end{minipage}

```

```

340 \fi
341 \vskip20pt
342 \begin{minipage}[t][][c]{0.5\textwidth}%
343 \centering
344 \usebeamerfont{author}\insertauthor\,\,[0.3cm]%
345 \usebeamerfont{date}\insertdate
346 \end{minipage}
347 \end{center}
348 \vfill
349 }

```

bottomtrianglescolor Place the text on the section frame with two colored triangles on the bottom.

```

350 \defbeamertemplate{section page}{bottomtrianglescolor}
351 {
352 \vskip40pt
353 \begin{center}
354 \begin{minipage}[t][][c]{\textwidth}%
355 \centering
356 \usebeamerfont{section title}\usebeamercolor[fg]{title}
357 \insertsectionhead\par
358 \end{minipage}
359 \end{center}
360 \vfill
361 }

```

bottomtrianglesbw Place the text on the section frame with two black and white triangles on the bottom.

```

362 \defbeamertemplate{section page}{bottomtrianglesbw}
363 {
364 \vskip40pt
365 \begin{center}
366 \begin{minipage}[t][][c]{\textwidth}%
367 \centering
368 \usebeamerfont{section title}\usebeamercolor[fg]{title}
369 \insertsectionhead\par
370 \end{minipage}
371 \end{center}
372 \vfill
373 }

```

bigtriangles Place the text on the section frame with two big triangles.

```
374 \defbeamertemplate{section page}{bigtriangles}
375 {
376 \vskip200pt
377 \begin{flushright}
378 \begin{minipage}[t]{0.62\textwidth}\usebeamercolor[fg]{title}
379 \usebeamertfont{section title}\usebeamercolor[fg]{title}
380 \raggedleft
381 \insertsectionhead\par
382 \end{minipage}
383 \end{flushright}
384 \vfill
385 }
```

lefttriangles Place the text on the section frame with two small left triangles.

```
386 \defbeamertemplate{section page}{lefttriangles}
387 {
388 \vskip25pt
389 \begin{beamercolorbox}[wd=\textwidth, leftskip=100pt, sep=4pt]{section page header}
390 \usebeamertfont{section title}\usebeamercolor[fg]{title}
391 \insertsectionhead\par
392 \end{beamercolorbox}%
393 \vfill
394 }
```

7.2.6 Lists and floats

```
395 \setbeamertemplate{caption label separator}{: }
396 \setbeamertemplate{caption}[numbered]
```

7.2.7 Margins

The margins are defined as

```
397 \setbeamersize{text margin left=.05\paperwidth, text margin right=.05\paperwidth}
```

7.2.8 Process package options

```
398 \trigon@inner@setdefaults
399 \ProcessPgfPackageOptions{/trigon/inner}
```

7.3 Trigon outer theme

A `beamer` outer theme dictates the style of the frame elements traditionally set outside the “body” of each slide, such as the frame title, the logo, the footer, etc.

7.3.1 Package dependencies

```
400 \RequirePackage{pgfopts}
```

7.3.2 Definitions

We define the command `\logsmall` to specify the logo that needs to be applied displayed on all normal frames.

```
401 \def\logsmall{}  
402 \newcommand\smalllogo[1]{  
403   \def\logsmall{\#1}  
404 }  
405 %  \end{macrocode}  
406 %  
407 % \subsubsection{Options}  
408 %  
409 % \begin{macro}{numbering}  
410 %   Adds slide number to the bottom of each regular frame  
411 %   \begin{macrocode}  
412 \pgfkeys{  
413   /trigon/outer/numbering/.cd,  
414     .is choice,  
415     none/.code=\setbeamertemplate{frame numbering}[none],  
416     counter/.code=\setbeamertemplate{frame numbering}[counter],  
417     fraction/.code=\setbeamertemplate{frame numbering}[fraction]  
418 }  
419 %  \end{macrocode}  
420 % \end{macro}  
421 %  
422 % \begin{macro}{\trigon@outer@setdefaults}  
423 %   Sets default values for the outer theme options.  
424 %   \begin{macrocode}  
425 \newcommand{\trigon@outer@setdefaults}{  
426   \pgfkeys{/trigon/outer/.cd,  
427     numbering=counter  
428 }
```

```

429 }
430 %   \end{macrocode}
431 % \end{macro}
432 %
433 %
434 % \subsubsection{Frame title}
435 % \begin{macro}{frametitle}
436 % Template for the frame title
437 %   \begin{macrocode}
438 \defbeamertemplate*{frametitle}{trigon}
439 {
440   \vspace{-1pt}
441   \begin{beamercolorbox}[wd=\paperwidth, leftskip=0.05\paperwidth]{frametitle}
442     \vskip.4cm
443     \ifx\insertframesubtitle\empty%
444       \usebeamertemplate{frametitle}\usebeamercolor[fg]{frametitle}\insertframetitle}%
445     \else%
446       \usebeamertemplate{frametitle}\usebeamercolor[fg]{frametitle}\insertframetitle}\\[-.25cm]
447       \usebeamertemplate{framesubtitle}\usebeamercolor[fg]{framesubtitle}\insertframesubtitle}%
448   \fi
449   \vskip.3cm
450   \end{beamercolorbox}
451 }
452 %   \end{macrocode}
453 % \end{macro}
454 %
455 %
456 % \subsubsection{Fame header}
457 % \begin{macro}{headline}
458 % Templates for the frame header
459 %   \begin{macrocode}
460 \defbeamertemplate{headline}{none}={}
461 \defbeamertemplate*{headline}{logo}{
462 \ifx\logosmall\empty\else
463   \hfill\includegraphics[width=20pt]{\logosmall}\hspace{20pt}\vspace{-40pt}
464 \fi
465 }
466 %   \end{macrocode}
467 % \end{macro}
468 %

```

```

469 %
470 % \subsubsection{Frame footer}
471 % Define various template for frame footer and manage frame numbering.
472 % \begin{macrocode}
473 \setbeamertemplate{navigation symbols}{}
474
475 \defbeamertemplate{frame footer}{none}{}
476 \defbeamertemplate{frame footer}{custom}[1]{ #1 }
477 \defbeamertemplate{frame numbering}{none}{}
478 \defbeamertemplate{frame numbering}{counter}{\insertframenumber}
479 \defbeamertemplate{frame numbering}{fraction}{%
480   \insertframenumber/\inserttotalframenumber
481 }
482
483 \defbeamertemplate{footline}{plain}{%
484   \begin{beamercolorbox}[wd=\textwidth, sep=10pt]{page number in head/foot}%
485     \usebeamerfont{page number in head/foot}%
486     \usebeamercolor[fg]{page number in head/foot}%
487     \usebeamertemplate*{frame footer}%
488     \hfill%
489     \usebeamertemplate*{frame numbering}%
490   \end{beamercolorbox}%
491 }
492
493 \setbeamertemplate{footline}[plain]
494 % \end{macrocode}
495 %
496 % \begin{macro}{appendix}
497 %   Removes page numbering and per-slide progress bars when |\appendix| is
498 %   called. This makes it easier to include additional ``backup slides'' at
499 %   the end of the presentation, especially in conjunction with the package
500 %   |appendixnumberbeamer|.
501 % \begin{macrocode}
502 \AtBeginDocument{%
503   \apptocmd{\appendix}{%
504     \pgfkeys{%
505       /trigon/outer/.cd,
506       numbering=none
507     }{}{%
508   }

```

```

509 %     \end{macrocode}
510 % \end{macro}
511 %
512 % \subsubsection{Process package options}
513 %
514 %     \begin{macrocode}
515 \trigon@outer@setdefaults
516 \ProcessPgfPackageOptions{/trigon/outer}

```

7.4 Trigon font theme

A `beamer` font theme sets the style of the font used in the document.

7.4.1 Package dependencies

```
517 \RequirePackage{pgfopts}
```

7.4.2 Title format options

`titleformat title` Controls the format of the title.

```

518 \pgfkeys{
519   /trigon/font/titleformat title/.cd,
520   .is choice,
521   regular/.code={%
522     \let\trigon@titleformat\@empty%
523     \setbeamerfont{title}{shape=\normalfont}%
524   },
525   smallcaps/.code={%
526     \let\trigon@titleformat\@empty%
527     \setbeamerfont{title}{shape=\scshape}%
528   },
529   allsmallcaps/.code={%
530     \let\trigon@titleformat\lowercase%
531     \setbeamerfont{title}{shape=\scshape}%
532     \PackageWarning{beamerthemetrigon}{%
533       Be aware that titleformat title=allsmallcaps can lead to problems%
534     }
535   },
536   allcaps/.code={%
537     \let\trigon@titleformat\uppercase%
538     \setbeamerfont{title}{shape=\normalfont}

```

```

539      \PackageWarning{beamerthemetrigon}{%
540          Be aware that titleformat title=allcaps can lead to problems%
541      }
542  },
543 }

```

titleformat subtitle Controls the format of the subtitle.

```

544 \pgfkeys{
545   /trigon/font/titleformat subtitle/.cd,
546   .is choice,
547   regular/.code={%
548     \let\trigon@subtitleformat\empty%
549     \setbeamertfont{subtitle}{shape=\normalfont}%
550   },
551   smallcaps/.code={%
552     \let\trigon@subtitleformat\empty%
553     \setbeamertfont{subtitle}{shape=\scshape}%
554   },
555   allsmallcaps/.code={%
556     \let\trigon@subtitleformat\lowercase%
557     \setbeamertfont{subtitle}{shape=\scshape}%
558   \PackageWarning{beamerthemetrigon}{%
559       Be aware that titleformat subtitle=allsmallcaps can lead to problems%
560   }
561 },
562   allcaps/.code={%
563     \let\trigon@subtitleformat\uppercase%
564     \setbeamertfont{subtitle}{shape=\normalfont}%
565   \PackageWarning{beamerthemetrigon}{%
566       Be aware that titleformat subtitle=allcaps can lead to problems%
567   }
568 },
569 }

```

titleformat section Controls the format of the section title.

```

570 \pgfkeys{
571   /trigon/font/titleformat section/.cd,
572   .is choice,
573   regular/.code={%

```

```

574     \let\trigon@sectiontitleformat\@empty%
575     \setbeamerfont{section title}{shape=\normalfont}%
576 },
577 smallcaps/.code={%
578     \let\trigon@sectiontitleformat\@empty%
579     \setbeamerfont{section title}{shape=\scshape}%
580 },
581 allsmallcaps/.code={%
582     \let\trigon@sectiontitleformat\MakeLowercase%
583     \setbeamerfont{section title}{shape=\scshape}%
584     \PackageWarning{beamerthemetrigon}{%
585         Be aware that titleformat section=allsmallcaps can lead to problems%
586     }
587 },
588 allcaps/.code={%
589     \let\trigon@sectiontitleformat\MakeUppercase%
590     \setbeamerfont{section title}{shape=\normalfont}%
591     \PackageWarning{beamerthemetrigon}{%
592         Be aware that titleformat section=allcaps can lead to problems%
593     }
594 },
595 }

```

titleformat frame Controls the format of the frame title.

```

596 \pgfkeys{
597   /trigon/font/titleformat frame/.cd,
598   .is choice,
599   regular/.code={%
600     \let\trigon@frametitleformat\@empty%
601     \setbeamerfont{frametitle}{shape=\normalfont}%
602   },
603   smallcaps/.code={%
604     \let\trigon@frametitleformat\@empty%
605     \setbeamerfont{frametitle}{shape=\scshape}%
606   },
607   allsmallcaps/.code={%
608     \let\trigon@frametitleformat\MakeLowercase%
609     \setbeamerfont{frametitle}{shape=\scshape}%
610     \PackageWarning{beamerthemetrigon}{%

```

```

611      Be aware that titleformat frame=allsmallcaps can lead to problems%
612      }
613  },
614  allcaps/.code={%
615      \let\trigon@frametitleformat\MakeUppercase%
616      \setbeamerfont{frametitle}{shape=\normalfont}
617      \PackageWarning{beamerthemetrigon}{%
618          Be aware that titleformat frame=allcaps can lead to problems%
619      }
620  },
621 }

```

titleformat aliases Allows `titleformat title` et al. to be used in the `\usetheme` declaration, where L^AT_EX automatically removes all spaces.

```

622 \pgfkeys{
623   /trigon/font/.cd,
624   titleformattitle/.code=\pgfkeysalso{titleformat title=#1},
625   titleformatsubtitle/.code=\pgfkeysalso{titleformat subtitle=#1},
626   titleformatsection/.code=\pgfkeysalso{titleformat section=#1},
627   titleformatframe/.code=\pgfkeysalso{titleformat frame=#1},
628 }

```

\trigon@font@setdefaults Sets default values for font theme options.

```

629 \newcommand{\trigon@font@setdefaults}{%
630   \pgfkeys{/trigon/font/.cd,
631     titleformat title=regular,
632     titleformat subtitle=regular,
633     titleformat section=regular,
634     titleformat frame=regular,
635   }
636 }

```

We first define hooks to change the case format of the titles.

```

637 \def\trigon@titleformat#1{#1}
638 \def\trigon@subtitleformat#1{#1}
639 \def\trigon@sectiontitleformat#1{#1}
640 \def\trigon@frametitleformat#1{#1}

```

To make the uppercase and lowercase macros work in the title, subtitle, etc., we have to patch the appropriate `beamer` commands that set their values. This solution was suggested by Enrico Gregorio in an answer to [this StackExchange question](#).

```

641 \patchcmd{\beamer@title}{%
642   {\def\inserttitle{#2}}%
643   {\def\inserttitle{\trigon@titleformat{#2}}}%
644   {}%
645   {\PackageError{beamerfontthemetrigon}{Patching title failed}\@ehc}%
646 \patchcmd{\beamer@subtitle}{%
647   {\def\insertsubtitle{#2}}%
648   {\def\insertsubtitle{\trigon@subtitleformat{#2}}}%
649   {}%
650   {\PackageError{beamerfontthemetrigon}{Patching subtitle failed}\@ehc}%
651 \patchcmd{\sectionentry}{%
652   {\def\insertsectionhead{#2}}%
653   {\def\insertsectionhead{\trigon@sectiontitleformat{#2}}}%
654   {}%
655   {\PackageError{beamerfontthemetrigon}{Patching section title failed}\@ehc}%
656 \tempswafalse
657 \patchcmd{\beamer@section}{%
658   {\edef\insertsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{\unexpanded{#1}}}}%
659   {\edef\insertsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{%
660     \noexpand\trigon@sectiontitleformat{\unexpanded{#1}}}}}%
661   {\tempswatrue}%
662   {}%
663 \patchcmd{\beamer@section}{%
664   {\def\insertsectionhead{\hyperlink{Navigation\the\c@page}{#1}}}}%
665   {\def\insertsectionhead{\hyperlink{Navigation\the\c@page}{%
666     \trigon@sectiontitleformat{#1}}}}%
667   {\tempswatrue}%
668   {}%
669 \patchcmd{\beamer@section}{%
670   {\protected@edef\insertsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{#1}}}}%
671   {\protected@edef\insertsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{%
672     \noexpand\trigon@sectiontitleformat{#1}}}}%
673   {\tempswatrue}%
674   {}%
675 \if@tempswa\else

```

```

676  \PackageError{beamerfontthemetrigon}{Patching section title failed}\@ehc
677 \fi
678 \tempswafalse
679 \patchcmd{\beamer@subsection}
680   {\edef\insertsubsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{\unexpanded{#1}}}}
681   {\edef\insertsubsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{%
682     \noexpand\trigon@sectiontitleformat{\unexpanded{#1}}}}}
683   {\@tempswatrue}
684   {}
685 \patchcmd{\beamer@subsection}
686   {\def\insertsubsectionhead{\hyperlink{Navigation\the\c@page}{#1}}}
687   {\def\insertsubsectionhead{\hyperlink{Navigation\the\c@page}{%
688     \trigon@sectiontitleformat{#1}}}}
689   {\@tempswatrue}
690   {}
691 \patchcmd{\beamer@subsection}
692   {\protected@edef\insertsubsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{#1}}}
693   {\protected@edef\insertsubsectionhead{\noexpand\hyperlink{Navigation\the\c@page}{%
694     \noexpand\trigon@sectiontitleformat{#1}}}}
695   {\@tempswatrue}
696   {}
697 \if@tempswa\else
698  \PackageError{beamerfontthemetrigon}{Patching section title failed}\@ehc
699 \fi

```

Similarly, to make the `\MakeLowercase` and `\MakeUppercase` macros work in the frame title we have to patch `\beamer@@frametitle`.

```

700 \patchcmd{\beamer@@frametitle}
701  {{%
702    \gdef\insertframetitle{{\#2\ifnum\beamer@autobreakcount>0\relax{}\space%
703      \usebeamertemplate*[frametitle continuation]\fi}}%
704    \gdef\beamer@frametitle{\#2}%
705    \gdef\beamer@shortframetitle{\#1}%
706  }%
707  {{%
708    \gdef\insertframetitle{\trigon@frametitleformat{\#2}\ifnum%
709      \beamer@autobreakcount>0\relax{}\space%
710      \usebeamertemplate*[frametitle continuation]\fi}}%
711    \gdef\beamer@frametitle{\#2}%

```

```

712     \gdef\beamer@shortframetitle{#1}%
713   }%
714 {}%
715 {\PackageError{beamerfontthemetrigon}{Patching frame title failed}\@ehc}

```

7.4.3 General font definitions

```

716 \setbeamerfont{author}      {size=\normalsize}
717 \setbeamerfont{title}       {size=\LARGE,series=\bfseries}
718 \setbeamerfont{section title}{size=\LARGE,series=\mdseries}
719 \setbeamerfont{date}        {size=\small}
720 \setbeamerfont*[subtitle]  {size=\Large}
721 \setbeamerfont{frametitle}  {size=\LARGE}
722 \setbeamerfont{framesubtitle}{size=\large}
723
724 \setbeamerfont{alerted text} {size=\normalsize,series=\bfseries}
725 \setbeamerfont{block title}{size=\normalsize,series=\bfseries}
726 \setbeamerfont{block title alerted}{size=\normalsize,series=\bfseries}
727
728 \setbeamerfont{section in toc}{size=\Large}
729 \setbeamerfont{subsection in toc}{size=\large}
730 \setbeamerfont{page number in head/foot}{size=\scriptsize}
731
732 \setbeamerfont{description item}{series=\bfseries}
733 \setbeamerfont{caption}{size=\small}
734 \setbeamerfont{caption name}{series=\bfseries}
735 % \end{macrocode}
736 %
737 % \subsubsection{Process package options}
738 %
739 % \begin{macrocode}
740 \trigon@font@setdefaults
741 \ProcessPgfPackageOptions{/trigon/font}

```

7.5 Trigon color theme

A **beamer** color theme sets the colors used for the different elements of the document.

7.5.1 Package dependencies

```
742 \RequirePackage{pgfopts}
```

7.5.2 Options

headingcolor Select the color to use for all headings (title, section, frame, etc.).

```
743 \def\headcol{black}
744 \pgfkeys{
745   /trigon/color/headingcolor/.cd,
746   .is choice,
747   black/.code=\def\headcol{black},
748   theme/.code=\def\headcol{tPrim}
749 }
```

textcolor Select the color to use for all headings (title, section, frame, etc.).

```
750 \def\txtcol{black}
751 \pgfkeys{
752   /trigon/color/textcolor/.cd,
753   .is choice,
754   black/.code=\def\txtcol{black},
755   theme/.code=\def\txtcol{tPrim!50!black}
756 }
```

block Optionally removes the light grey background to block environments like **theorem** and **example**.

```
757 \pgfkeys{
758   /trigon/color/block/.cd,
759   .is choice,
760   transparent/.code=\trigon@block@transparent,
761   fill/.code=\trigon@block@fill
762 }
763 %
764 % \begin{macro}{\trigon@color@setdefaults}
765 %   Sets default values for color theme options.
766 % \begin{macrocode}
767 \newcommand{\trigon@color@setdefaults}%
768   \pgfkeys{/trigon/color/.cd,
769   block=fill,
770   headingcolor=black,
771   textcolor=black
```

```
772  }
773 }
```

7.5.3 Base colors

```
774 \definecolor{tPrim}{HTML}{00707F}    % Green-Blue
775 \definecolor{tSec}{HTML}{5FA4B0}      % Green-Blue light
776 \definecolor{tAccent}{HTML}{F07F3C}   % Orange
777 \definecolor{tGrey}{HTML}{E6E6E1}     % Grey-Beige
```

7.5.4 Derived elements

All the elements are set using the base colors defined here above.

```
778 \setbeamercolor{background canvas}{bg=white}
779 \setbeamercolor{normal text}{fg=\txtcol, bg= }
780 \setbeamercolor{alerted text}{fg=tAccent}
781 \setbeamercolor{example text}{fg=tSec}
782
783 \setbeamercolor{title}{fg=\headcol, bg= , parent=normal text}
784 \setbeamercolor{titlelike}{use=title, parent=title}
785 \setbeamercolor{author}{use=normal text, bg= , parent=normal text}
786 \setbeamercolor{date}{use=normal text, bg= , parent=normal text}
787 \setbeamercolor{institute}{use=normal text, parent=normal text}
788 \setbeamercolor{structure}{use=normal text, fg=normal text.fg}
789
790 \setbeamercolor{palette primary}{use=titlelike, parent=titlelike}
791 \setbeamercolor{frametitle}{use=titlelike, parent=titlelike}
```

Block environments such as `theorem` and `example` have a `tGrey` background color by default. The option `block=transparent` removes the background color.

```
792 \newcommand{\trigon@block@transparent}{
793   \setbeamercolor{block title}{%
794     use=normal text,
795     fg=normal text.fg,
796     bg=normal text.bg!96!fg
797   }
798   \setbeamercolor{block body}{%
799     use={block title, normal text},
800     bg=block title.bg!35!normal text.bg
801 }
```

```

802 }
803 \newcommand{\trigon@block@fill}{%
804   \setbeamercolor{block title}{%
805     use=normal text,
806     fg=normal text.fg,
807     bg=normal text.bg!80!fg
808   }
809   \setbeamercolor{block body}{%
810     use={block title, normal text},
811     bg=block title.bg!50!normal text.bg
812   }
813 }
814
815 \setbeamercolor{block title alerted}{%
816   use={block title, alerted text},
817   bg=block title.bg,
818   fg=alerted text.fg
819 }
820 \setbeamercolor{block title example}{%
821   use={block title, example text},
822   bg=block title.bg,
823   fg=example text.fg
824 }
825 \setbeamercolor{block body alerted}{use=block body, parent=block body}
826 \setbeamercolor{block body example}{use=block body, parent=block body}

```

The color of other smaller elements is defined as follows

```

827 \setbeamercolor{footnote}{fg=normal text.fg!90}
828 \setbeamercolor{footnote mark}{fg=.}
829 \setbeamercolor{footline}{fg=normal text.fg!50, parent=normal text}
830 \setbeamercolor{caption}{fg=black!60, parent=normal text}
831
832 \setbeamercolor{itemize item}{fg=tPrim, parent=normal text}
833 \setbeamercolor{itemize subitem}{use=itemize item, parent=itemize item}
834 \setbeamercolor{itemize subsubitem}{use=itemize item, parent=itemize item}
835 \setbeamercolor{enumerate item}{fg=tPrim, parent=normal text}
836 \setbeamercolor{enumerate subitem}{use=enumerate item, parent=enumerate item}
837 \setbeamercolor{enumerate subsubitem}{use=enumerate item, parent=enumerate item}
838 \setbeamercolor{description item}{fg=tPrim, parent=normal text}

```

7.5.5 Process package options

```
839 \trigon@color@setdefaults  
840 \ProcessPgfPackageOptions{/trigon/color}
```