

The **moloch** package (v0.1.0)

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*Matthias wrote the original version of this manual for the Metropolis theme, which has since been modified by Johan Larsson.

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1 Introduction

Beamer is a great way to make presentations with LaTeX, but its theme selection is surprisingly sparse. The stock themes share an aesthetic that can be a little cluttered, while the few distinctive custom themes available are often specialized for a particular corporate or institutional brand.

The goal of `moloch` is to provide a simple, modern Beamer theme suitable for anyone to use. It tries to minimize noise and maximize space for content; the only visual flourish it offers is an (optional) progress bar added to each slide or to the section slides.

`moloch`'s codebase is maintained at <https://github.com/jolars/moloch>. If you have any issues, find mistakes in the manual or want to help make the theme even better, please get in touch there.

`moloch` is a fork of the popular Metroplis theme by Matthias Vogelgesang. The motivation for the fork was to fix some longstanding bugs in Metropolis and also simplify the codebase to make it easier to maintain and less fragile to changes in the underlying Beamer code.

2 Getting Started

2.1 Installing from CTAN

For most users, we recommend installing `moloch` from [CTAN](#). If you keep your \TeX distribution up-to-date, chances are good that `moloch` is already installed. If it is not, you need to update your packages. If your distribution is \TeX Live (or Mac \TeX on OS X), the following command updates all packages.

```
tlmgr update --all
```

If this results in an error, you may need to run it with administrative privileges:

```
sudo tlmgr update --all
```

Mac \TeX on OS X also provides a graphical interface for `tlmgr` called \TeX Live Utility.

For any other distribution please refer to its documentation on how to update your packages.

2.2 Installing from Source

If you want to use the development version of `moloch`, you can install it manually. You only need a recent L^AT_EX distribution which includes **l3build**. Then simply follow the steps below.

Download the source with a git clone of <https://github.com/jolars/moloch>

Install the package by running `l3build install` inside the downloaded directory.

2.3 A Minimal Example

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

```
\documentclass{beamer}
\usepackage{moloch}
\title{A minimal example}
\date{\today}
\author{Johan Larsson}
\institute{Centre for Modern Beamer Themes}
\begin{document}
\maketitle
\section{First Section}
\begin{frame}{First Frame}
Hello, world!
\end{frame}
\end{document}
```

2.4 Dependencies

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

- `tikz`
- `pgfopts`
- `calc`

2.5 Pandoc

To use this theme with `Pandoc`-based presentations, you can run the following command

```
$ pandoc -t beamer -V theme:moloch -o output.pdf input.md
```

3 Customization

3.1 Package options

The theme 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 `moloch` in the preamble:

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

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

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

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

option key	<i>list of possible values</i>	default
	A short description of the option.		

3.1.1 Inner theme

sectionpage	<i>none, simple, progressbar</i>	progressbar
	Adds a slide at the start of each section (<code>simple</code>) with an optional thin progress bar below the section title (<code>progressbar</code>). The <code>none</code> option disables the section page.		

subsectionpage	<i>none, simple, progressbar</i>	none
	Optionally adds a slide at the start of each subsection. If enabled with the <code>simple</code> or <code>progressbar</code> options, the style of the <code>section page</code> will be updated to match the style of the <code>subsection page</code> . Note that section slides and subsection slides can appear consecutively if both are enabled; you may want to use this option together with <code>sectionpage=none</code> depending on the section structure of your presentation.		

3.1.2 Outer theme

progressbar	<i>none, head, frametitle, foot</i>	none
	Optionally adds a progress bar to the top of each frame (<code>head</code>), the bottom of each frame (<code>foot</code>), or directly below each frame title (<code>frametitle</code>).		

3.1.3 Color theme

```
background dark, light..... light
```

Provides the option to have a dark background and light foreground instead of the reverse.

3.2 Color Customization

The included `moloch` 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 three beamer colors:

- `normal text` (dark fg, light bg)
- `alerted text` (colored fg, should be visible against dark or light)
- `example text` (colored fg, should be visible against dark or light)

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

```
\setbeamercolor{ ... }{ fg= ... , bg= ... }
```

in your preamble. For greater customization, you can redefine any of the other stock beamer colors. In addition to the stock colors the theme defines a number of `moloch` specific colors, which can also be redefined to your liking.

```
\setbeamercolor{progress bar}{ ... }
\setbeamercolor{title separator}{ ... }
\setbeamercolor{progress bar in head/foot}{ ... }
\setbeamercolor{progress bar in section page}{ ... }
```

For low-light situations `moloch` it might be helpful to use the `moloch-highcontrast` color theme. It is enabled like any other color theme:

```
\usecolortheme{moloch-highcontrast}
```

3.3 Commands

3.3.1 Standout frames

The `moloch` inner theme offers a custom frame format with large, centered text and an inverted background—perfect for focusing attention on single sentence or image. To use it, add the key `standout` to the frame:

```
\begin{frame}[standout]
```

```
    Thank you!  
\end{frame}
```

4 Known Issues

4.1 Interactions with other color themes

`moloch` can be used along with any other Beamer color theme, such as `crane` or `seahorse`. If you wish to do this, it is usually best to include the `moloch` subpackages individually so the `moloch` color theme is never loaded. This will prevent conflicts between the `moloch` color theme and your preferred theme.

For example, overriding the color theme as follows may not work as expected because `\usetheme{moloch}` loads the `moloch` color theme, which defines a relationship between the frametitle background and the primary palette of the theme. Since `seahorse` assumes a different relationship between its palettes, the result is a grey, rather than periwinkle, frametitle background.

```
\usetheme{moloch}  
\usecolortheme{seahorse}
```

The correct colors are chosen if the `moloch` outer, inner, and font themes are loaded separately:

```
\useoutertheme{moloch}  
\useinnertheme{moloch}  
\usefonttheme{moloch}  
\usecolortheme{seahorse} % or your preferred color  
    theme
```

Please note that `moloch` may not use all the colors defined in your favourite Beamer color theme. In particular, `moloch` does not set a background color for the title; this will cause issues when using color themes like `whale` which set a white foreground for the title.

4.2 Notes on second screen

If you use the [show notes on second screen] option built in to Beamer and compile with X_EL^AT_EX, text on slides following the first section slide may be rendered in white instead of the regular colour. This is due to a bug in Beamer or

X_ETEX itself. You can work around it either by compiling with Lua_T_EX or by adding the following code to your preamble to reset the text color on each slide.

```
\makeatletter
\def\beamer@framenotesbegin{%
  at beginning of slide
  \usebeamercolor[fg]{normal text}
  \gdef\beamer@noteitems{}%
  \gdef\beamer@notes{}%
}
\makeatother
```

4.3 Standout frames with labels

Because the `standout` frame option creates a group to restrict the colour change to a single slide, labels defined after calling `standout` will stay local to the group. In other words, the following may result in a “label undefined” error.

```
\begin{frame}[standout, label=conclusion]{Conclusion}
  Awesome slide
\end{frame}
```

To fix this problem, change the order of the keys in the frame.

```
\begin{frame}[label=conclusion, standout]{Conclusion}
  Awesome slide
\end{frame}
```

This error can be unwittingly triggered if you export your slides from Emacs Org mode, which automatically adds labels after frame options. Alex Branham [offers](#) the following solution for Org mode users, using `org-set-property`.

```
* Start of a frame
:PROPERTIES:
:BEAMER_opt: label=conclusion,standout
:END:
```

4.4 Standout frames with Pandoc

With Pandoc versions prior 1.17.2 it was not possible to create standout frames because Pandoc only supported a specific list of frame attributes thus ignoring

additional attributes such as `{.standout}`.

5 License

`moloch` is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#). This means that if you change the theme and re-distribute it, you must retain the copyright notice header and license it under the same CC-BY-SA license. This does not affect any presentations that you create with the theme.

6 Implementation

6.1 `moloch` parent theme

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

6.1.1 Package dependencies

```
1 \RequirePackage{pgfopts}
```

6.1.2 Options

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

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

To avoid generating externalized figures of the progressbar we have to disable them with “tikzexternalenable” and “tikzexternaldisable”. However, if the “external” library is not loaded we would get undefined control sequence problems, hence we define them as no-ops if they are not defined yet.

```
10 \providecommand{\tikzexternalenable}{}  
11 \providecommand{\tikzexternaldisable}{}
```

6.1.3 Component sub-packages

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

```
12 \useinnertheme{moloch}
13 \useoutertheme{moloch}
14 \usecolortheme{moloch}
15 \usefonttheme{moloch}
```

6.1.4 Custom commands

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

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

```
16 \newcommand{\molochset}[1]{\pgfkeys{/moloch/.cd,#1}}
```

`\mreducelistspacing`

```
17 \newcommand{\mreducelistspacing}{\vspace{-\topsep}}
```

6.1.5 Process package options

```
18 \ProcessPgfOptions{/moloch}
```

6.2 moloch 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;
- itemize, enumerate, and description environments;
- block environments including theorems and proofs;
- figures and tables; and
- footnotes and plain text.

6.2.1 Package dependencies

```
19 \RequirePackage{keyval}
20 \RequirePackage{calc}
21 \RequirePackage{pgfopts}
22 \RequirePackage{tikz}
```

6.2.2 Options

`sectionpage` Optionally add a slide marking the beginning of each section.

```
23 \pgfkeys{  
24   /moloch/inner/sectionpage/.cd,  
25   .is choice,  
26   none/.code=\moloch@disablesectionpage,  
27   simple/.code={%  
28     \moloch@enablesectionpage%  
29     \setbeamertemplate{section page}[simple]%
```

30 },
31 progressbar/.code={%
32 \moloch@enablesectionpage%
33 \setbeamertemplate{section page}[progressbar]%

34 },
35 }

`subsectionpage` Optionally add a slide marking the beginning of each subsection.

```
36 \pgfkeys{  
37   /moloch/inner/subsectionpage/.cd,  
38   .is choice,  
39   none/.code=\moloch@disablessubsectionpage,  
40   simple/.code={%  
41     \moloch@enablessubsectionpage%  
42     \setbeamertemplate{section page}[simple]%

43   },  
44   progressbar/.code={%  
45     \moloch@enablessubsectionpage%  
46     \setbeamertemplate{section page}[progressbar]%



47   },  
48 }


```

`\moloch@inner@setdefaults` Set default values for inner theme options.

```
49 \newcommand{\moloch@inner@setdefaults}{  
50   \pgfkeys{/moloch/inner/.cd,  
51     sectionpage=progressbar,  
52     subsectionpage=none  
53   }  
54 }
```

6.2.3 Title page

`title page` Template for the title page. Each element is only typeset if it is defined by the user. If `\subtitle` is empty, for example, it won't leave a blank space on the title slide.

```
55 \setbeamertemplate{title page}{  
56   \begin{minipage}[b]{\paperheight}{\textwidth}  
57     \ifx\inserttitlegraphic\empty\else\usebeamertemplate*{title graphic}\fi  
58     \vfill%  
59     \ifx\inserttitle\empty\else\usebeamertemplate*{title}\fi  
60     \ifx\insertsubtitle\empty\else\usebeamertemplate*{subtitle}\fi  
61     \usebeamertemplate*{title separator}  
62 }
```

Beamer's definition of `\insertauthor` is always nonempty, so we have to test another macro initialized by `\author{...}` to see if the user has defined an author. This solution was suggested by Enrico Gregorio in an answer to [this Stack Exchange question](#).

```
63   \ifx\beamer@shortauthor\empty\else\usebeamertemplate*{author}\fi  
64   \ifx\insertinstitute\empty\else\usebeamertemplate*{institute}\fi  
65   \ifx\insertdate\empty\else\usebeamertemplate*{date}\fi  
66   \vfill  
67   \null  
68 \end{minipage}  
69 }
```

Normal people should use `\maketitle` or `\titlepage` instead of using the `title page` beamer template directly. Beamer already defines these macros, but we patch them here to make the title page `[plain]` by default, remove `\@thanks`, and ensure the title frame number doesn't count.

`\maketitle` Inserts the title frame, or causes the current frame to use the `title page` template.

```
\titlepage  
70 \def\maketitle{  
71   \ifbeamer@inframe  
72     \titlepage  
73   \else  
74     \frame[plain,noframenumbering]{\titlepage}  
75   \fi  
76 }  
77 \def\titlepage{  
78   \usebeamertemplate{title page}  
79 }
```

title graphic Set the title graphic in a zero-height box, so it doesn't change the position of other elements.

```
80 \setbeamertemplate{title graphic}{  
81   \vbox to 0pt {  
82     \vspace*{2em}  
83     \inserttitlegraphic%  
84   }%  
85   \nointerlineskip%  
86 }
```

title Set the title on the title page.

```
87 \setbeamertemplate{title}{  
88   \raggedright%  
89   \linespread{1.0}%  
90   \inserttitle%  
91   \par%  
92   \vspace*{0.5em}  
93 }
```

subtitle Set the subtitle on the title page.

```
94 \setbeamertemplate{subtitle}{  
95   \raggedright%  
96   \insertsubtitle%  
97   \par%  
98   \vspace*{0.5em}  
99 }
```

title separator Template to set the title graphic in a zero-height box. (It won't change the position of other elements.)

```
100 \newlength{\moloch@titleseparator@linewidth}  
101 \setlength{\moloch@titleseparator@linewidth}{0.4pt}  
102 \setbeamertemplate{title separator}{  
103   \tikzexternaldisable%  
104   \begin{tikzpicture}  
105     \fill[fg] (0,0) rectangle (\textwidth, \moloch@titleseparator@linewidth);  
106   \end{tikzpicture}%  
107   \tikzexternalenable%  
108   \par%  
109 }
```

author Set the author on the title page.

```
110 \setbeamertemplate{author}{  
111   \vspace*{2em}  
112   \insertauthor%  
113   \par%  
114 }
```

institute Set the institute on the title page.

```
115 \setbeamertemplate{institute}{  
116   \vspace*{0.5em}  
117   \insertinstitute%  
118   \par%  
119 }
```

date Set the date on the title page.

```
120 \setbeamertemplate{date}{  
121   \vspace*{1.5em}  
122   \insertdate%  
123   \par%  
124 }
```

6.2.4 Section page

section page Template for the section title slide at the beginning of each section.

```
125 \defbeamertemplate{section page}{simple}{  
126   \begin{center}  
127     \usebeamercolor[fg]{section title}  
128     \usebeamerfont{section title}  
129     \insertsectionhead\par  
130     \ifx\insertsubsectionhead\empty\else  
131       \usebeamercolor[fg]{subsection title}  
132       \usebeamerfont{subsection title}  
133       \insertsubsectionhead  
134     \fi  
135   \end{center}  
136 }  
137 \defbeamertemplate{section page}{progressbar}{  
138   \centering  
139   \begin{minipage}{0.7875\linewidth}  
140     \raggedright  
141     \usebeamercolor[fg]{section title}
```

```

142     \usebeamertemplate{section title}
143     \insertsectionhead\[-1ex]
144     \usebeamertemplate*[progress bar in section page]{}
145     \par
146     \ifx\insertsubsectionhead\@empty\else%
147         \usebeamercolor[fg]{subsection title}%
148         \usebeamertemplate{subsection title}%
149         \insertsubsectionhead
150     \fi
151 \end{minipage}
152 \par
153 \vspace{\baselineskip}
154 }
155 \newcommand{\moloch@disablesectionpage}{%
156     \AtBeginSection{%
157         % intentionally empty
158     }
159 }
160 \newcommand{\moloch@enablesectionpage}{%
161     \AtBeginSection{%
162         \ifbeamer@inframe
163             \sectionpage
164         \else
165             \frame[plain,c,noframenumbering]{\sectionpage}
166         \fi
167     }
168 }

```

subsection page Template for the subsection title slide that can optionally be added to at the beginning of each subsection.

```

169 \setbeamertemplate{subsection page}{%
170     \usebeamertemplate*[section page]{}
171 }
172 \newcommand{\moloch@disablesubsectionpage}{%
173     \AtBeginSubsection{%
174         % intentionally empty
175     }
176 }
177 \newcommand{\moloch@enablesubsectionpage}{%
178     \AtBeginSubsection{%
179         \ifbeamer@inframe
180             \subsectionpage
181         \else

```

```

182     \frame[plain,c,noframenumbering]{\subsectionpage}
183     \fi
184 }
185 }
```

`progress bar in section page` Template for the progress bar displayed by default on the section page. This code is duplicated in large part in the outer theme's template `progress bar in head/foot`.

```

186 \newlength{\moloch@progressonsectionpage}
187 \newlength{\moloch@progressonsectionpage@linewidth}
188 \setlength{\moloch@progressonsectionpage@linewidth}{0.4pt}
189 \setbeamertemplate{progress bar in section page}{
190   \pgfmathsetlength{\moloch@progressonsectionpage}{
191     \textwidth * min(1,\insertframenumber/\inserttotalframenumber)
192   }
193   \tikzexternaldisable
194   \begin{tikzpicture}
195     \fill[bg]
196     (0,0)
197     rectangle
198     (\textwidth, \moloch@progressonsectionpage@linewidth);
199     \fill[fg]
200     (0,0)
201     rectangle
202     (\moloch@progressonsectionpage, \moloch@progressonsectionpage@linewidth);
203   \end{tikzpicture}
204   \tikzexternalenable
205 }
```

The above code assumes that `\insertframenumber` is less than or equal to `\inserttotalframenumber`. However, this is not true on the first compile; in the absence of an `.aux` file, `\inserttotalframenumber` defaults to 1. This behaviour could cause fatal errors for long presentations, as `\moloch@progressonsectionpage` would exceed \TeX 's maximum length (16383.99999pt, roughly 5.75 metres or 18.9 feet). To avoid this, we increase the default value for `\inserttotalframenumber`; presentations with over 4000 slides will still break on first compile, but users in that situation likely have deeper problems to solve.

```
206 \def\inserttotalframenumber{100}
```

6.2.5 Lists and floats

```

207 \setbeamertemplate{itemize item}{\(\bullet\)}
208 \setbeamertemplate{itemize subitem}{\(\circ\)}
```

```

209 \setbeamertemplate{itemize subsubitem}{\textbullet}
210 \setbeamertemplate{caption label separator}{: }
211 \setbeamertemplate{caption}[numbered]

```

6.2.6 Footnotes

```

212 \setbeamertemplate{footnote}{%
213   \parindent 0em\noindent%
214   \raggedright
215   \usebeamercolor{footnote}%
216   \hbox to 0.8em{\hfil\insertfootnotemark}%
217   \insertfootnotetext\par%
218 }

```

6.2.7 Text and spacing settings

```

219 \newlength{\moloch@parskip}
220 \setlength{\moloch@parskip}{0.5em}
221 \setlength{\parskip}{\moloch@parskip}
222 \linespread{1.15}

```

By default, Beamer frames offer the `c` option to *almost* vertically center the text, but the placement is a little too high. To fix this, we redefine the `c` option to equalize `\beamer@frametopskip` and `\beamer@framebottomskip`. This solution was suggested by Enrico Gregorio in an answer to [this Stack Exchange question](#).

```

223 \define@key{beamerframe}{c}[true]{% centered
224   \beamer@frametopskip=0pt plus 1fill\relax%
225   \beamer@framebottomskip=0pt plus 1fill\relax%
226   \beamer@frametopskipautobreak=0pt plus .4\paperheight\relax%
227   \beamer@framebottomskipautobreak=0pt plus .6\paperheight\relax%
228   \def\beamer@initfirstlineunskip{}%
229 }

```

6.2.8 Standout frames

`moloch` offers a custom frame format with large, centered text and an inverted background. To use it, add the key `standout` to the frame:

```
\begin{frame}[standout] ... \end{frame}.
```

`standout` Optional arguments to Beamer's frames are implemented using `\define@key` from the `keyval` package, which will execute code when the defined option is called. For the `standout` option, we begin a group, change the colors and set frame options.

```

230 \providebool{\moloch@standout}
231 \define@key{beamerframe}{standout}[true]{%

```

```

232  \booltrue{moloch@standout}
233  \begingroup
234  \setkeys{beamerframe}{c}
235  \setkeys{beamerframe}{noframenumbering}
236  \ifbeamercolorempty[bg]{palette primary}{%
237      \setbeamercolor{background canvas}{%
238          use=palette primary,
239          bg=-palette primary.fg
240      }%
241  }{%
242      \setbeamercolor{background canvas}{%
243          use=palette primary,
244          bg=palette primary.bg
245      }%
246  }%
247  \setbeamercolor{local structure}{%
248      fg=palette primary.fg
249  }%
250  \usebeamercolor[fg]{palette primary}
251 }

```

Then we just have to close the group after the standout slide is finished in order to restore the colours and fonts for the rest of the presentation. Unfortunately, we cannot use or this (see <http://tex.stackexchange.com/questions/226319/>). Instead, we prepend the `\endgroup` to `\beamer@reseteecodes`, which is run exactly once at the end of each slide.

```

252 \preto{\beamer@reseteecodes}{%
253   \ifbool{moloch@standout}{%
254     \endgroup
255     \boolfalse{moloch@standout}
256   }{}%
257 }{}%

```

We set the fonts and the alignment on the inner content, in such a way that the speaker's note layout isn't affected by the custom formatting.

```

258 \AtBeginEnvironment{beamer@frameslide}{%
259   \ifbool{moloch@standout}{%
260     \centering
261     \usebeamertfont{standout}
262   }{}%
263 }

```

6.2.9 Process package options

```
264 \moloch@inner@setdefaults  
265 \ProcessPgfPackageOptions{/moloch/inner}
```

6.3 moloch outer theme

A `beamer` outer theme dictates the style of the frame elements traditionally set outside the body of each slide: the head, footline, and frame title.

6.3.1 Package dependencies

```
266 \RequirePackage{calc}  
267 \RequirePackage{pgfopts}
```

6.3.2 Options

`progressbar` Adds a progress bar to the top, bottom, or frametitle of each slide.

```
268 \pgfkeys{  
269   /moloch/outer/progressbar/.cd,  
270   .is choice,  
271   none/.code={%  
272     \setbeamertemplate{headline}[plain]  
273     \setbeamertemplate{frametitle}[plain]  
274     \setbeamertemplate{footline}[plain]  
275   },  
276   head/.code={\pgfkeys{/moloch/outer/progressbar=none}  
277     \addtobeamertemplate{headline}{}{  
278       \usebeamertemplate*{progress bar in head/foot}  
279     }  
280   },  
281   frametitle/.code={\pgfkeys{/moloch/outer/progressbar=none}  
282     \addtobeamertemplate{frametitle}{}{  
283       \usebeamertemplate*{progress bar in head/foot}  
284     }  
285   },  
286   foot/.code={\pgfkeys{/moloch/outer/progressbar=none}  
287     \addtobeamertemplate{footline}{}{  
288       \usebeamertemplate*{progress bar in head/foot}  
289     }  
290   },  
291 }
```

`\moloch@outer@setdefaults` Sets default values for outer theme options.

```

292 \newcommand{\moloch@outer@setdefaults}{
293   \pgfkeys{/moloch/outer/.cd,
294     progressbar=none,
295   }
296 }
```

6.3.3 Head and footnote

All good `beamer` presentations should already remove the navigation symbols, but `moloch` removes them automatically (just in case).

```
297 \setbeamertemplate{navigation symbols}{}
```

`headline` Templates for the head- and footline at the top and bottom of each frame.

```

footline
298 \defbeamertemplate{headline}{plain}{}
299 \defbeamertemplate{footline}{plain}{%
300   \begin{beamercolorbox}[
301     leftskip=4pt,%
302     rightskip=5pt,%
303     wd=\textwidth,%
304   ]{footline}%
305   \usebeamercolor[fg]{page number in head/foot}%
306   \usebeamertemplate{page number in head/foot}%
307   \usebeamertemplate*{frame footer}%
308   \hfill%
309   \usebeamertemplate*{page number in head/foot}\vskip4pt%
310 \end{beamercolorbox}%
311 }
```

6.3.4 Frametitle

`frametitle` Templates for the frame title, which is optionally underlined with a progress bar.

```

312 \newlength{\moloch@frametitle@padding}
313 \setlength{\moloch@frametitle@padding}{2.2ex}
314 \newcommand{\moloch@frametitlestrut@start}{%
315   \rule{0pt}{\moloch@frametitle@padding + \totalheightof{X}}%
316 }
317 \newcommand{\moloch@frametitlestrut@end}{%
318   \rule[-\moloch@frametitle@padding]{0pt}{\moloch@frametitle@padding}%
319 }
320 \defbeamertemplate{frametitle}{plain}{%
321   \nointerlineskip%
322   \begin{beamercolorbox}[%
```

```

323     wd=\paperwidth,%
324     sep=0pt,%
325     leftskip=\moloch@frametitle@padding,%
326     rightskip=\the\glueexpr \moloch@frametitle@padding plus 1fill\relax,%
327 ]{frametitle}%
328 \moloch@frametitlestrut@start%
329 \insertframetitle%
330 \nolinebreak%
331 \moloch@frametitlestrut@end%
332 \end{beamercolorbox}%
333 }
334 \setbeamertemplate{frametitle continuation}{%
335   \usebeamertemplate{frametitle}%
336   \romannumeral \insertcontinuationcount
337 }

```

progress bar in head/foot Template for the progress bar optionally displayed below the frame title on each page. Much of this code is duplicated in the inner theme's template **progress bar in section page**.

```

338 \newlength{\moloch@progressinheadfoot}
339 \newlength{\moloch@progressinheadfoot@linewidth}
340 \setlength{\moloch@progressinheadfoot@linewidth}{0.4pt}
341 \setbeamertemplate{progress bar in head/foot}{%
342   \nointerlineskip
343   \pgfmathsetlength{\moloch@progressinheadfoot}{%
344     \paperwidth * min(1,\insertframenumber/\inserttotalframenumber)%
345   }
346   \begin{beamercolorbox}[wd=\paperwidth]{progress bar in head/foot}
347     \tikzexternaldisable
348     \begin{tikzpicture}
349       \fill[bg]
350       (0,0)
351       rectangle
352       (\paperwidth, \moloch@progressinheadfoot@linewidth);
353       \fill[fg]
354       (0,0)
355       rectangle
356       (\moloch@progressinheadfoot, \moloch@progressinheadfoot@linewidth);
357     \end{tikzpicture}
358     \tikzexternalenable
359   \end{beamercolorbox}
360 }

```

6.3.5 Process package options

```
361 \moloch@outer@setdefaults  
362 \ProcessPgfPackageOptions{/moloch/outer}
```

6.4 moloch font theme

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

6.4.1 Package dependencies

```
363 \RequirePackage{pgfopts}
```

6.4.2 General font definitions

```
364 \setbeamerfont{title}{size=\Large, series=\bfseries}  
365 \setbeamerfont{author}{size=\small}  
366 \setbeamerfont{date}{size=\small}  
367 \setbeamerfont{section title}{size=\Large, series=\bfseries}  
368 \setbeamerfont{block title}{size=\normalsize, series=\bfseries}  
369 \setbeamerfont{block title alerted}{size=\normalsize, series=\bfseries}  
370 \setbeamerfont*[subtitle]{size=\large}  
371 \setbeamerfont{frametitle}{size=\large, series=\bfseries}  
372 \setbeamerfont{caption}{size=\small}  
373 \setbeamerfont{caption name}{series=\bfseries}  
374 \setbeamerfont{description item}{series=\bfseries}  
375 \setbeamerfont{bibliography entry author}{size=\normalsize, series=\normalfont}  
376 \setbeamerfont{bibliography entry title}{size=\normalsize, series=\bfseries}  
377 \setbeamerfont{bibliography entry location}{size=\normalsize, series=\normalfont}  
378 \setbeamerfont{bibliography entry note}{size=\small, series=\normalfont}  
379 \setbeamerfont{standout}{size=\Large, series=\bfseries}
```

6.5 moloch color theme

6.5.1 Package dependencies

```
380 \RequirePackage{pgfopts}
```

6.5.2 Options

`colors` Provides the option to have a dark background and light foreground instead of the reverse.

```
381 \pgfkeys{  
382   /moloch/color/background/.cd,  
383   .is choice,  
384   dark/.code=\moloch@colors@dark,  
385   light/.code=\moloch@colors@light,
```

```
386 }
```

\moloch@color@setdefaults Sets default values for color theme options.

```
387 \newcommand{\moloch@color@setdefaults}{%
388   \pgfkeys{/moloch/color/.cd,
389   background=light,
390 }
391 }
```

6.5.3 Base colors

```
392 \definecolor{mDarkBrown}{HTML}{604c38}
393 \definecolor{mDarkTeal}{HTML}{23373b}
394 \definecolor{mLightBrown}{HTML}{EB811B}
395 \definecolor{mLightGreen}{RGB}{0,128,128}
```

6.5.4 Base styles

All colors in moloch are derived from the definitions of `normal text`, `alerted text`, and `example text`.

```
396 \newcommand{\moloch@colors@dark}{%
397   \setbeamercolor{normal text}{%
398     fg=black!2,
399     bg=mDarkTeal
400   }
401   \usebeamercolor[fg]{normal text}
402 }
403 \newcommand{\moloch@colors@light}{%
404   \setbeamercolor{normal text}{%
405     fg=mDarkTeal,
406     bg=black!2
407   }
408 }
409 \setbeamercolor{alerted text}{%
410   fg=mLightBrown
411 }
412 \setbeamercolor{example text}{%
413   fg=mLightGreen
414 }
```

6.5.5 Derived colors

The titles and structural elements (e.g. `itemize` bullets) are set in the same color as `normal text`. This would ideally done by setting `normal text` as a parent

style, which we do to set `titlelike`, but this doesn't work for `structure` as its foreground is set explicitly in `beamercolorthemedefault.sty`.

```
415 \setbeamercolor{titlelike}{use=normal text, parent=normal text}
416 \setbeamercolor{author}{use=normal text, parent=normal text}
417 \setbeamercolor{date}{use=normal text, parent=normal text}
418 \setbeamercolor{institute}{use=normal text, fg=normal text.fg!80!normal text.bg}
419 \setbeamercolor{structure}{use=normal text, fg=normal text.fg}
```

The “primary” palette should be used for the most important navigational elements, and possibly of other elements. `moloch` uses it for frame titles and slides.

```
420 \setbeamercolor{palette primary}{%
421   use=normal text,
422   fg=normal text.bg,
423   bg=normal text.fg
424 }
425 \setbeamercolor{frametitle}{%
426   use=palette primary,
427   parent=palette primary
428 }
```

The `moloch` inner or outer themes optionally display progress bars in various locations. Their color is set by `progress bar` but the two different kinds can be customized separately. The horizontal rule on the title page is also set based on the progress bar color and can be customized with `title separator`.

```
429 \setbeamercolor{progress bar}{%
430   use=alerted text,
431   fg=alerted text.fg,
432   bg=alerted text.fg!50!black!30
433 }
434 \setbeamercolor{title separator}{%
435   use=progress bar,
436   parent=progress bar
437 }
438 \setbeamercolor{progress bar in head/foot}{%
439   use=progress bar,
440   parent=progress bar
441 }
442 \setbeamercolor{progress bar in section page}{%
443   use=progress bar,
444   parent=progress bar
445 }
```

Block environments use alerted tex and example text for the title

```
446 \setbeamercolor{block title alerted}{%
447   use={block title, alerted text},
448   fg=alerted text.fg
449 }
450 \setbeamercolor{block title example}{%
451   use={block title, example text},
452   fg=example text.fg
453 }
```

Footnotes

```
454 \setbeamercolor{footnote}{fg=normal text.fg!90}
455 \setbeamercolor{footnote mark}{fg=.}
```

We also reset the bibliography colors in order to pick up the surrounding colors at the time of use. This prevents us having to set the correct color in normal and standout mode.

```
456 \setbeamercolor{bibliography entry author}{fg=, bg=}
457 \setbeamercolor{bibliography entry title}{fg=, bg=}
458 \setbeamercolor{bibliography entry location}{fg=, bg=}
459 \setbeamercolor{bibliography entry note}{fg=, bg=}
```

6.5.6 Process package options

```
460 \moloch@color@setdefaults
461 \ProcessPgfPackageOptions{/moloch/color}
462 \mode<all>
```