Moloch: Minimalist, Feature-Rich Beamer Presentations

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Abstract

Moloch is a fork of the popular LaTeX *beamer* [1] theme *Metropolis*, which is no longer actively maintained. Moloch aims to fix outstanding issues with *Metropolis* while keeping the original design mostly intact. This article summarizes the changes made in *Moloch* as well as some general *TUGboat* style guidelines for authors.

1 Introduction

I have long been an admirer and user of the excellent Metropolis theme, which provides a clean, professional look for LaTeX *beamer* presentations in addition to enabling useful features such as progress bars and (what I think are) sane defaults for presentations.

The problem is that *Metropolis* is no longer actively maintained — its latest updates date six years back and over time an increasing number of issues have cropped up. Most of them are minor and corrigible through workarounds, but my preamble has grown increasingly cluttered with such patches. Moreover, a number of users have requested features, while others have offered contributions to help improve the theme. Metropolis being unmaintained, however, these contributions have not been incorporated.

This has led me to fork *Metropolis* into a new theme, which I call *Moloch*[1]. The goal is to keep the original design philosophy and look of Metropolis while fixing outstanding issues and incorporating useful features and contributions from the community. I have made some design changes, but these have largely been made to make the design more accessible and to bring the behavior of the theme closer to standard *beamer* behavior. Finally, I have also made a number of internal code improvements to make the theme more robust and maintainable going forward. Users of *Metropolis* should find it easy to switch to *Moloch*, whilst at the same time benefit from the bug fixes, new features, and improved stability.

Since neither *Metropolis* nor *Moloch* have been introduced in *TUGboat* before, I will begin to do just that by introducing *Moloch*. Users of *Metropolis* may wish to skip ahead to Section 4, which summarizes the changes made in *Moloch*.

2 Getting Started with Moloch

Moloch is a standard *beamer* theme and is enabled as any other theme. Here is a minimal example presentation using *Moloch*:

```
1  \documentclass{beamer}
2
3  \usetheme{moloch}
4
5  \title{Moloch Theme}
6  \subtitle{A Minimalist Beamer Theme}
7  \author{Johan Larsson}
8  \institute{
9    Department of Mathematical Sciences,
10   University of Copenhagen
11 }
12 \date{\today}
13 \titlegraphic{\hfill\includegraphics{logo.pdf}}
14
15 \begin{document}
16
17 \maketitle
18
19 \begin{frame}
20   \frametitle{A Sample Frame}
21
22   Hello, World!
23 \end{frame}
24
25 \end{document}
```

This will produce a presentation with the title slide shown in Figure 1. As you can see, *Moloch* provides a distinctive title slide with somewhat different formatting than the standard *beamer* title slide[2].

Unlike most themes, *Moloch* comes with a number of options that can be set either when loading the theme or via the macro `\molochset`. The benefit of using the latter is that you can change options midway through your presentations and limit them to the current scope. The following two calls are therefore two equivalent ways to modify the title page style.

```
1  \usetheme[titlepage=plain]{moloch}
2  \molochset{titlepage=plain}
```
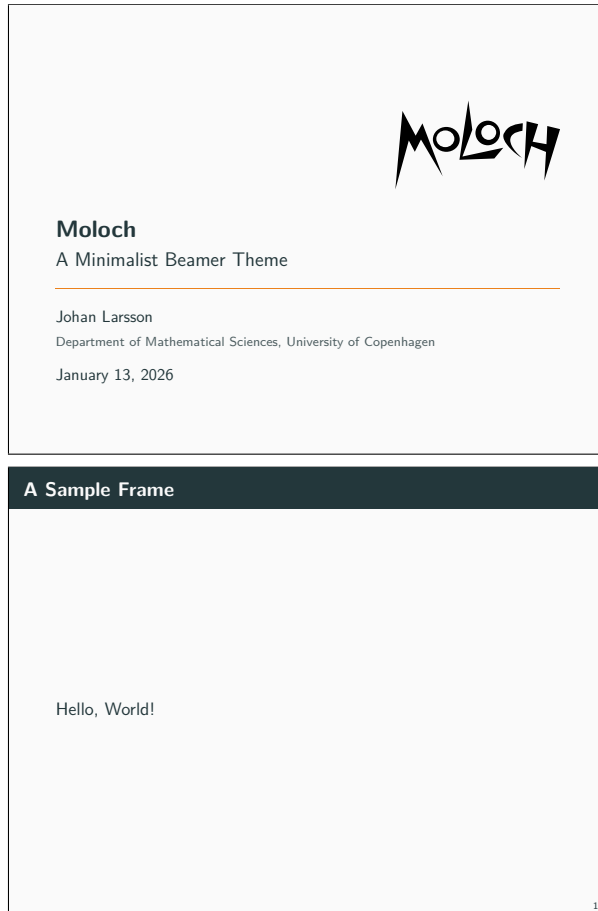
Like other *beamer* themes, Moloch is split into a color theme, font theme, and inner and outer themes. Here, we assume that the full Moloch theme is loaded via `\usetheme{moloch}`.

2.1 Color Themes

A major new feature of *Moloch* is a full-fledged color theme system that allows users to customize the colors used in the theme in an intuitive way. It also supports the notion of light and dark modes,

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[1] Likely familiar to your if you know your Metropolis.

[2] But if you prefer the default *beamer* one, then *Molochf* has the option to use that instead

Figure 1: The title slide and first frame of a presentation made with Moloch.

which can be switched between at any time in the presentation. In addition, we also support a number of pre-defined color themes.

To set the overall color theme, use the option `colortheme` and `colortheme variant` for selecting light or dark mode. For example,
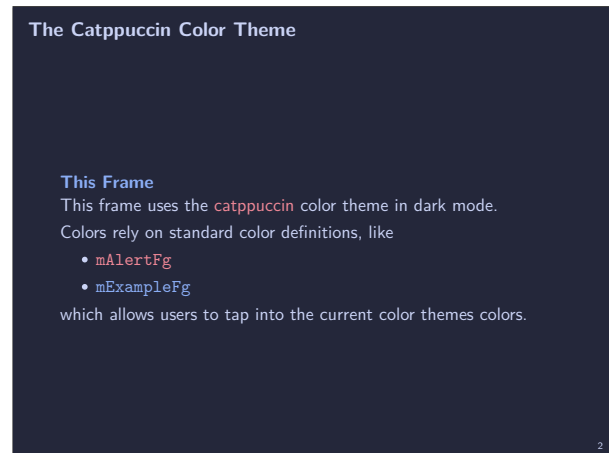
```
1  \molochset{
2    colortheme=catppuccin,
3    colortheme variant=dark
4  }
5
6  \begin{frame}
7    \frametitle{The Catppuccin Color Theme}
8
9    \begin{exampleblock}{This Frame}
10     This frame uses the \alert{catppuccin}
11     color theme in dark mode.
12   \end{exampleblock}
13
14   Colors rely on standard color definitions,
15   like
16   \begin{itemize}
```

```
17     \item \textcolor{mAlertFg}{
18       \texttt{mAlertFg}}
19     \item \textcolor{mExampleFg}{
20       \texttt{mExampleFg}}
21   \end{itemize}
22   which allows users to tap into the current
23   color theme's colors.
24
25   \medskip
26
27 \end{frame}
```


Figure 2: A frame using the `catppuccin` color theme in dark mode.

3 Changes in Moloch compared to Metropolis

4 Documentation

References

[1] samcarter, J. Wright, et al. beamer – a latex class for creating presentations, version 3.76, 2025-08-13. `https://ctan.org/pkg/beamer`

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