Using the beamertheme—edmaths Beamer Theme

Josh Fogg

School of Mathematics The University of Edinburgh

j.fogg@ed.ac.uk

Version 0.98 2024-08-15

1 Introduction

This is theme for beamer, used to creating presentations for the School of Mathematics at the University of Edinburgh. It's designed as an accompaniment to edmaths and provides an easy way to generate a presentation in Lagrange which aligns the university brand guidelines. This means you can focus on your actual writing, rather than worrying about font spacing, margins sizes, *etc*.

2 Initial Setup

This theme is designed to work with beamer, which should be available with any TEX distribution. It can be used with any LaTeX engine, including pdfLaTeX, XeLaTeX, or LuaLaTeX. While it should work with any reasonably up-to-date TEX distribution, it is tested with 2020 and later.

The essential steps to setup are then:

- 1. Choose a document class using \documentclass [<options>] {beamer}, with <options> being defined in the full beamer documentation.
- 2. Apply the theme using \usetheme{edmaths}.
- 3. Use \title [Short Title] {Full Title} to define the title (the Short Title is optional).
- 4. Set the \author{...} and \date{...}.

These steps **must** be done in exactly this order or the compiler will throw errors.

Unlike edmaths, this theme does not automatically load the standard suite of LTEX math packages (e.g. amsmath) so you may wish to load those. Instead it loads amsfonts, graphicx, lmodern, and mathptmx which are necessary for the theme.

The basic package has no other special requirements, but if you have certain additional packages installed then you can use some fancifying options (see below).

3 Package Options

When loading beamertheme—edmaths with

```
\usetheme[<options>]{edmaths}
```

we can supply additional <options> as a comma-separated list of the following keywords.

3.1 Colour

The default theme is styled around University of Edinburgh **blue** (#00325F). It's also available in three other official brand colour-scheme variations by specifying at most one of:

- colour=UoEorange for orange (#CC5911),
- colour=UoEgreen for green (#9C9A00),
- colour=UoEcyan for cyan (#457E81).

In theory other off-brand colours could be applied using xcolor and the same syntax, but this isn't officially supported so results may vary.

3.2 Title Height

By default the title height is 10ex. This can be modified by specifying theight=<x>, where <x> is the desired height in a LaTeX compatible unit.

4 Usage

Once beamertheme—edmaths is set up, a simple example of how it might be put together in beamer is in the listing below. A more complicated example is packaged with beamertheme—edmaths and available here. What this looks like compiled can be viewed here.

4.1 Overleaf

As a student or staff member at the University of Edinburgh you have access to Overleaf Professional! Do make use of this, it alleviates many of the headaches which come with using Lagrange across multiple computers, which you surely will..

4.2 Archiving your presentation for the future

The current version of beamertheme—edmaths satisfies the brand guidelines at any one time. Given these change, you may find that if you need to recompile your presentation later that the formatting changes. To avoid this, save an archived version of the beamerthemeedmaths.sty file in the same folder as your slides. You only need to do this once you have completely finished your presentation however; there's no need to do it during the writing process.

Listing 1: Example usage of beamertheme—edmaths.

```
\documentclass{beamer}
\usetheme{edmaths}
\title[Short Title]{A Long and verbose title}
\subtitle{and a sub-title} % optional
\author{Dr Benway}
\institute{The Mental Institute} % optional
\date{Feb 1935}
\begin{document}
\maketitle
\begin{frame}{Words of Advice for Young People}\label{sec:Advice}
    People often ask me if I have any words of \alert{advice} for
    young people\ldots \\[2ex] \pause
    \begin{itemize}
        \item<1-> \alert{Never} interfere in a \alert{boy-and-girl}
        \item<2-> Any \alert{old soul} is worth saving \\
                  \uncover<3->{at \alert{least to} a priest},
            \begin{itemize}
                \item<4-> But \alert{not} every soul is \alert{worth}
                          buying \}.
            \end{itemize}
        \  \ \item<5-> \ldots
    \end{itemize}
\end{frame}
\begin{frame}{Conclusions}\label{sec:what?}
    \begin{itemize}
        \item<2-> What \alert{are} we doing here?
        \item<4-> What?
        \item<2-> Answers:
            \begin{itemize}
                \item<3-> We are here \alert{to go}.
            \end{itemize}
    \end{itemize}
\end{frame}
\end{document}
```

5 Speaker Notes

There are various solutions for writing notes to accompany LaTeX presentations made with beamer. In each of these use the relevant command *after* the slide you wish to annotate.

5.1 Beamer's note

Core beamer itself actually comes with a command, \note, which can be used for writing notes that are then included as separate 'notes' pages in the complied PDF. Exactly how these are handled is controlled through the document class arguments

and then notes are added with

```
\begin{frame}
    ...
\end{frame}
\note{Some wonderful note.}
```

These have the upside that you have full access to LaTeX formatting when writing your speaker notes, but the downside that they can be cumbersome to work with when presenting. Multiple complications are needed to get notes and presentations in separate PDF files.

5.2 PDFPC's note

PDFPC is a presenter console with multi-monitor support for PDF files. There's an official package, pdfpc, for adding meta-data to presentation files which are compatible with their presenter console. The screenshot in Figure 1 shows how the console looks when viewing the example presentation.

To use this add

```
\usepackage[overridenote=true] {pdfpc}
and then it's just \note{Some wonderful note.} as before.
```

These will then be included as "comments" within the complied PDF which PDFPC displays as notes in the presenter console. These have the upside that they're smoother to work with when presenting, but the downside that the only formatting supported is \\ for newlines.

5.3 Brandt's pnote

There are two packages called pdfpc—latex—notes, one by Carsten Brandt and a fork by p4pyru5. These both generate PDFPC compatible notes using \pnote{Some wonderful note.}. They served as the inspiration for PDFPC's official solution, but each come with their own (varying support for formatting, wider integration, *etc*).

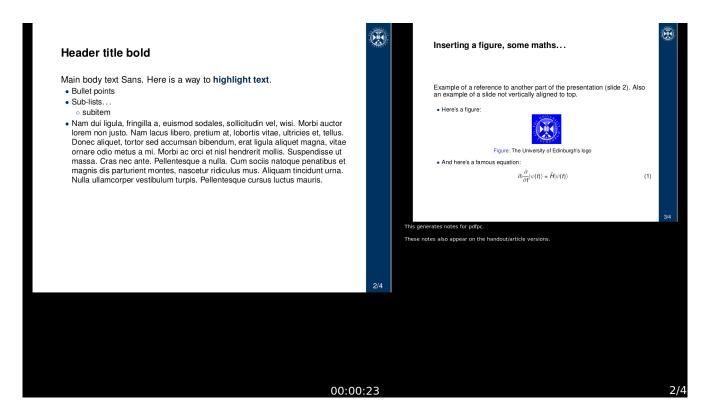


Figure 1: Speaker notes in PDFPC.

5.4 Usher's bnote

The original version of the University of Edinburgh beamer template by Saturnino Luz at the Usher Institute included its own package, beamernotes, for generating a PDFPC compatible notes file.

To use it save beamernotes. sty either to your MTFX path or local to your project. Then add

```
\usepackage{beamernotes}
```

to your document header and use

```
\bnote{Some wonderful note.}
```

to write your notes. This solution had the upside that your notes were included in a separate file still automatically read by PDFPC, but the downside that all formatting was lost *including* the ability to write newlines.

6 Acknowledgements

The original beamertheme—edmaths was written by Saturnino Luz for Usher, then modified by Ben Brown with general university branding. Both are freely provided under the terms of the Lagranger Public License v1.3c and from 2020 onwards have been maintained by Josh Fogg (me).

If you have any issues using beamertheme—edmaths don't hesitate to get in touch either by email or on GitHub. Feel free pop me a message just to say hi too, it always makes my day!