THE HONG KONG
POLYTECHNIC UNIVERSITY
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PolyU Beamer Presentation Theme

Using LaTeX to prepare slides

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Contents

Slide-Making in LaTeX

We assume that you can use LaTeX. If not, you can refer to this page.

Beamer is one of the most popular and influential document classes for slide-making in LaTeX. You can find its full manual here.

Here, we will only introduce the basic functionalities so you can master them immediately.

Beamer vs. MS PowerPoint

Compared to Microsoft PowerPoint, LaTeX and Beamer provides these advantages:

- Beamer produces a `.pdf` file with no problems on fonts, formulas, or program versions.
- Math typesetting in LaTeX is much easier, e.g.,

$$\mathrm{i}\,\hbar\frac{\partial}{\partial t}\Psi(\mathbf{r},t) = -\frac{\hbar^2}{2\,m}\nabla^2\Psi(\mathbf{r},t) + V(\mathbf{r})\Psi(\mathbf{r},t).$$

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Document Class

To begin with, just use `beamer` document class with `poly` theme. It should be noted that the `poly.sty` file should be included in the same directory as the `main.tex` file.

Preamble about the document class

```
\documentclass[10pt,aspectratio=169]{beamer}
\usepackage{poly}
```

You can change the `aspectratio` to `43` to adjust the slide aspect ratio to 4:3.

Metadata

You can change the metadata displayed on the title slide:

Metadata

```
\title{Your Title}
\subtitle{Your Subtitle}
\author{First Author, Second Author}
\institute[COMP]{Department of Computing}
\date{Date}
```

Once settled, you can render the title slide with the command `\maketitle` in the body.

Texts

In a Sequence

- A typical slide has bulleted points.

Texts

In a Sequence

- A typical slide has bulleted points.
- These can be uncovered in sequence.

Texts

In a Sequence

- A typical slide has bulleted points.
- These can be uncovered in sequence.
- When rendered, they will be separated into multiple slides.

Images

Adding images works like in normal LaTeX:

Figure: A sample of image

Columns

Splitting the page is easy and common.

Typically, one side has a picture and the other text:

This is the first column.

You can have some texts here.

And this is the second one.

You can have some pictures or tables here.

Fonts

The priority when choosing a font is readability.

Here, we give some advice:

- Use serif (default) fonts only with high-resolution projectors or monitors.
- Use sans-serif fonts otherwise.
- Use *italic* or **bold** fonts to emphasize or highlight points.
- We also provide an **alert** font for emphasise.
- Use `monospace` fonts to display codes.

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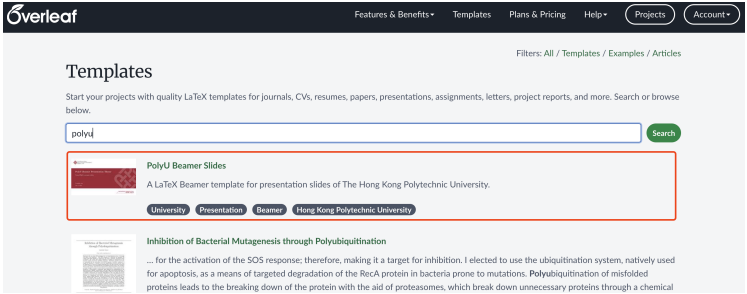
Good Luck!

- If you have corrections or suggestions, please feel free to contact me!
- You can find this project in Overleaf Templates by searching `polyu`.
- You can also find this project on Github! Stars are welcome!



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