

## GDUE Beamer Presentation Theme

Using LATEX to prepare slides

Kevin Guo
Department of Computing
September 25, 2025





- ▶ Introduction
- **▶** Examples
- ▶ Summary
- ▶ References

# 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[2] these advantages:

- Beamer produces a .pdf file with no problems[1] on fonts, formulas, or program versions.
- Math typesetting in LATEX is much easier, e.g.,

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



- ▶ Introduction
- **▶** Examples
- ▶ Summary
- ▶ References

#### **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

- 1 \documentclass[10pt,aspectratio=169]{beamer}
- 2 \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

- 1 \title{Your Title}
- 2 \subtitle{Your Subtitle}
- 3 \author{First Author, Second Author}
- 4 \institute[COMP]{Department of Computing}
- 5 \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.
- $\bullet\,$  These can be uncovered in sequence.

# Texts



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

# Images



Adding images works like in normal LATEX:

Virtue · Excellence · Role Model 进德修业 · 为人师表

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.



- ▶ Introduction
- **►** Examples
- **▶** Summary
- ▶ References

## Good Luck!



- Enough for an introduction! You should know enough by now.
- If you have corrections or suggestions, please feel free to contact me!
- You can also find this project on Github! Stars are welcome!



- ▶ Introduction
- **►** Examples
- **▶** Summary
- ▶ References

### References



Michel Goossens, Sebastian Rahtz, and Frank Mittelbach.

The LaTeX Graphics Companion.

Addison-Wesley, Reading, Massachusetts, 2nd edition, 1997.

Leslie Lamport.

ETEX: A Document Preparation System.

Addison-Wesley, Reading, Massachusetts, 2nd edition, 1994.



/ Virtue · Excellence · Role Model · 进德修业 · 为人师表